

United States International Trade Commission

The Information Technology Agreement

Advice and Information on the Proposed Expansion: Part 2

Investigation No. 332-536

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Acronyms

AC	Alternating current
CD	Compact disc
CEA	Consumer Electronics Association
CERA	Consumer Electronics Retailers Association
CT	Computed tomography
DCP	Digital cinema packs
DVD	Digital versatile disc
ESA	Entertainment Software Association
EU	European Union
FTA	Free trade agreement
GAMS	Government/Authorities Meeting on Semiconductors
GE	General Electric
HDMI	High-definition multimedia interface
HS	Harmonized System
HTS	Harmonized Tariff Schedule
ITA	Information Technology Agreement
ITI	Information Technology Industry Council
ICT	Information and communications technology
IT	Information technology
kVA	Kilovolt-amps
LCD	Liquid crystal display
LED	Light-emitting diode
MCCs	Motor control centers
MCOs	Multi-component integrated circuits
MCPs	Multi-chip integrated circuits (Multi-chip packages)
MEMS	Micro-electro-mechanical systems
MFN	Most favored nation
MRI	Magnetic resonance imaging
NAICS	North American Industrial Classification System
NAFTA	North American Free Trade Agreement
NEMA	National Electrical Manufacturers Association

Acronyms—*Continued*

NESOI	Not elsewhere specified or included
OECD	Organisation for Economic Co-operation and Development
PCA	Printed circuit assembly
PCB	Printed circuit board
PDA	Personal digital assistant
PLCs	Programmable logic controllers
PoP	Package-on-package
POSA	Point of sale activation
RILA	Retail Industry Leaders Association
R&D	Research and development
SIA	Semiconductor Industry Association
SiC	Silicon carbide
SiP	System-in-package
SoC	System-on-a-chip
WTO	World Trade Organization
USB	Universal serial bus

Executive Summary

Signatories to the Information Technology Agreement (ITA), a plurilateral accord that provides for the elimination of tariffs on specific information and communications technology products, meet periodically to review developments relating to ITA implementation matters, including whether the agreement should be expanded to cover additional products. According to the World Trade Organization (WTO), ITA participants represent over 96 percent of global trade in information technology products. At the May 15, 2012, meeting of the WTO ITA Committee, ITA participants agreed to expand product coverage and subsequently generated a consolidated draft product list for consideration by participating countries. Negotiations are ongoing, and a series of meetings are planned for June 2013 to finalize a revised product list.

Following the WTO ITA Committee meeting, the United States Trade Representative (USTR) asked the U.S. International Trade Commission (Commission or USITC) to provide advice and information on the draft list of products for ITA expansion, to be delivered in two reports. The USITC's first report, which was delivered to the USTR on October 24, 2012, indicated the uses of each of the products on the list for both information and communications technology (ICT) and non-ICT purposes. It also identified the products that U.S. industry and other interested parties view as import-sensitive. In this second report, the USITC identifies: (1) tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports for each product on the list. The report also examines the benefits of ITA expansion to U.S. industry, and provides an overview of selected key subsectors, including information on increased market access and export opportunities for products in these subsectors.

Main Findings

The proposed product expansion list includes 439 product descriptions, which cover 130 product codes of the international Harmonized System (HS). The most frequently occurring major U.S. export markets for products on the list were the European Union (EU), Canada, Mexico, China, and Japan. These same countries were also the most common major suppliers of U.S. imports of the products on the list. All of these countries, except Mexico, are ITA members. Products on the list faced tariffs of between zero and 35 percent in their respective major export markets. Further details on tariffs, U.S. bilateral trade, and major markets are provided in chapter 2.

The elimination of tariffs on ICT goods through the original ITA is widely credited with increasing global trade flows, promoting increased business and manufacturing efficiency, and enhancing overall competitiveness. These benefits flow to many sectors through increased productivity fueled by the adoption and integration of many ICT products. Expanding the ITA would likely increase these benefits by extending duty-free treatment to additional ICT products and innovations. Eliminating tariffs benefits producers and exporters by increasing market access opportunities and revenues. Higher revenues make U.S. companies more likely to invest in research and development (R&D) to create new products and increase hiring. Additionally, lower-cost imports benefit

retailers and consumers, as well as firms downstream in the supply chain, diffusing technology throughout the economy.

Based on the value of U.S. exports, the level of tariffs, and information submitted by U.S. industry and interested parties to the investigation, Commission staff selected five subsectors to illustrate the potential for increased market access opportunities for U.S. firms as a result of ITA expansion (table ES.1). Extending ITA product coverage to include these subsectors would likely increase U.S. export opportunities to ITA member countries that are already leading destinations for such exports, especially in cases where the importing country imposes moderate to high tariffs on these goods. Opportunities to increase exports also exist in other ITA markets with relatively high tariffs, where current U.S. exports are limited but growing.

TABLE ES.1 Selected subsectors: U.S. exports, major U.S. export markets, and tariffs, 2011

Subsector name	U.S. exports (billion \$)	Major U.S. export markets and tariffs (percent)
Medical devices	17.8	EU (Germany, Netherlands) - 0–2.1 Japan - 0 China - 2–7 Canada - 0
Relay and industrial control equipment	6.6	Mexico - 0–15 Canada - 0–2 EU (Germany, UK) - 0–3.2 China - 0–10
Optical media	2.7	Canada - 0–6 Mexico - 0–10 EU (Germany, Netherlands) - 0–3.5 Japan - 0
Loudspeakers and headsets	1.4	EU (Germany, UK) - 0–4.5 Mexico - 0–15 Canada - 0–6.5 Japan - 0
Multi-component integrated circuits (MCOs)	(^a)	(^a)

Source: Compiled by USITC.

^aMCOs can be classified under a wide range of HS subheadings, depending upon the end product that such MCOs are used in. As a result, any list of HS codes would be speculative and would likely result in an overstatement of U.S. export data. For a more detailed discussion of MCOs, refer to chapter 3.

CHAPTER 1

Introduction

The Information Technology Agreement (ITA) is a plurilateral accord that provides for the elimination of tariffs on specific information and communications technology products. According to the World Trade Organization (WTO), ITA participants represent over 96 percent of world trade in information technology products.¹ ITA signatories² meet periodically to review developments relating to implementation matters, including reviewing the agreement's product coverage to decide whether to add new products in response to technological advances, or to incorporate changes in tariff nomenclature (standard product names) used by the international Harmonized System (HS). At the meeting of the World Trade Organization (WTO) ITA Committee in Geneva on May 15, 2012, several ITA participants agreed to expand product coverage, and subsequently generated a consolidated draft product list for consideration by member countries. Negotiations are ongoing, and a series of meetings are planned for June 2013 to finalize a revised product list.³

On July 31, 2012, the U.S. International Trade Commission (Commission or USITC) received a letter from the United States Trade Representative (USTR) requesting, pursuant to section 115 of the Uruguay Round Agreements Act (19 U.S.C. § 3524) and section 332(g) of the Tariff Act of 1930 (19 U.S.C. § 1332(g)), that the Commission provide advice and information on the draft list of products attached to its request letter (appendix A). According to the USTR's letter, the list consists of products proposed by ITA participants for inclusion in an expanded ITA.⁴ The USTR asked the Commission to deliver its advice and information in two reports. The first report, which was delivered to the USTR on October 24, 2012, contained information on both the information and communications technology (ICT) and non-ICT purposes for which each product on the list is used, and identified the products that U.S. industry and other interested parties view as import-sensitive. This second report identifies, for each product on the list, tariffs in major markets, major producing countries, leading U.S. export markets, and leading sources of U.S. imports. This report also examines the benefits to U.S. industry of ITA expansion, and provides an overview of selected key subsectors, including information on increased market access and export opportunities for products in these subsectors.

Organization of the Report

The remainder of this chapter describes the report's analytical approach and provides an overview of its scope. Chapter 2 presents two tables providing specific information for each of the products on the proposed product expansion list from the USTR, including tariff and trade information. Chapter 3 examines potential benefits to U.S. industry as a result of the proposed ITA expansion and presents an overview of five selected key subsectors, including opportunities for increased U.S. exports if products in these

¹ WTO, "15 Years of the Information Technology Agreement," May 2012, 3.

² Appendix E presents the list of ITA member countries.

³ *Washington Trade Daily*, "Coming to a Workable ITA-II List," January 18, 2013.

⁴ The proposed product list, according to the cover note, was compiled from ITA member proposals "subject to the obligations set out in the Information Technology Agreement."

subsectors are added to the ITA. Appendix A contains a copy of the USTR's request letter, which includes the proposed product expansion list, while appendix B contains a copy of the *Federal Register* notice initiating the investigation. Appendix C presents the list of witnesses who appeared at the Commission's public hearing. Appendix D summarizes the positions of interested parties who submitted written statements to the Commission in connection with this investigation, and appendix E lists the ITA member countries.

Scope and Approach

As requested, this second report provides the following information for each product on the list provided by the USTR: (1) tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports. The report also examines the benefits of expanding the ITA both to U.S. industry and in five selected subsectors, including information on increased market access and export opportunities for products in these subsectors. The USTR requested that the Commission provide its report by February 15, 2013, and rely primarily on publicly available information and information furnished by interested parties in response to the Commission's notice of investigation.

To gather information for the second report, the Commission held a public hearing on November 8, 2012; interviewed industry associations, companies, and other federal agencies with related expertise by telephone, by email, and in person; and reviewed product literature and submissions made to the Commission in response to the *Federal Register* notice published on August 13, 2012 (appendix B). The Commission received a total of 11 written submissions, which are summarized in appendix D. The views and information contained in the submissions are incorporated into the Commission's report, as appropriate. The Commission also relied on data compiled by the WTO, U.S. Department of Commerce, United Nations, and other statistical sources for information on tariffs and trade.

The list of proposed expansion products transmitted to the Commission from the USTR is based on the 2007 Harmonized Schedule (HS). Because the ITA was signed in 1996, many of the products covered under the originally designated HS subheadings have shifted in the HS schedule to other subheadings. Therefore, the HS subheadings on the proposed product expansion list fall into 3 categories: (1) not currently covered under the existing agreement; (2) fully covered under the existing agreement; and (3) partially covered under the existing agreement.⁵ As the focus of this report is the benefits of expansion of ITA product coverage, the examination of overall benefits to U.S. industry in chapter 3 attempts to isolate the products that are not already covered under the existing agreement, and thus represent a true expansion of product coverage.

⁵ The proposed product expansion list transmitted from USTR to the Commission contains a cover note acknowledging that some products included on the list may already be covered by the ITA, but that these proposals do not affect participants' existing rights and obligations under the current agreement. A submission on behalf of the U.S. technology industry stated that changes to the 2007 edition of the HS resulted in the reclassification of some products included in the ITA, but that not all ITA participants have updated their tariff schedules to reflect these changes and their ITA commitments. Consequently, many of these products have been included on the proposed expansion list, even though they are already covered by the ITA. Information Technology Industry Council (ITI), written submission to the USITC, September 6, 2012, 7-8.

However, there is not a clean separation between currently covered products and those proposed for ITA coverage, making this effort imprecise. The Commission used available information from the WTO, industry submissions, and USITC staff expertise to concord the original 1996 HS codes to their 2007 counterparts, and these efforts represent our best estimate of the 2007 HS subheadings that encompass products covered by the 1996 agreement. These subheadings were excluded from our analysis of benefits from tariff elimination, whether they were covered wholly or only in part by the original ITA.

Furthermore, many of the products on the list from USTR are “ex-outs,” where the proposed product description is intended to represent only a portion of, or a particular product within, a 6-digit HS subheading. Since the analysis of tariff elimination in chapter 3 is based on the entire value of the trade in HS 6-digit subheadings referenced in the product list provided by USTR, it is likely to overstate trade values for such products.

The subsectors highlighted in chapter 3 were selected based on the value of U.S. exports, the level of tariffs in major markets, and information submitted by U.S. industry and other interested parties. The subsectors are predominantly made up of products that represent a true expansion of the ITA, rather than products from the proposed list that are already covered by the existing agreement. They illustrate the potential for increased export and market access opportunities for U.S. industry as a result of ITA expansion.

CHAPTER 2

Product Information

Introduction

This chapter contains information on the list of products attached to the USTR's request letter, presented in tabular form (tables 2.1 and 2.2). Table 2.1 covers the products that were listed in attachment A to the USTR's request letter and displays the following information:

- **HS classification and description.** The product classifications and descriptions were aggregated from several ITA participant countries' lists into one list by USTR, and are reproduced here directly from this list; spelling, punctuation, and capitalization are as in the original.¹
- **Major producing countries.** The table lists the largest global producers of each product, as identified by Commission staff or as provided by U.S. industry or other interested parties. In cases where production data were not available, the largest global exporters are reported. Where particular EU member countries dominated total production by the EU, those countries are listed in parentheses.
- **Leading U.S. export markets.** The table presents, in descending order, the top five markets for U.S. exports, in terms of value, for each product on the list. In cases where the EU was one of the top five U.S. export markets for a product, the two largest individual EU markets are listed in parentheses. Data reported are for 2011, the most recent year for which full-year data are available.
- **Leading sources of U.S. imports.** The table also lists, in descending order, the top five sources of U.S. imports, in terms of value, for each product on the list. In cases where the EU was one of the top five U.S. import sources for a product, the two largest individual EU sources are listed in parentheses. Data reported are for 2011, the most recent year for which full-year data are available.
- **Tariffs in major markets.** This column contains four types of information under the following subheadings: (1) major markets; (2) average tariff; (3) range of tariffs; and (4) tariff lines. The "major markets" subcolumn lists the top five global importers of each product. For each global importer, the simple average of the tariffs under the 6-digit level is reported in the "average" subcolumn. A range of tariffs under that 6-digit subheading, and the number of tariff lines under that 6-digit subheading, are reported in the "range" and "lines" subcolumns, respectively. For some products, only one tariff rate applies. For other products, multiple tariff lines are applicable under the 6-digit HS subheading, but the tariff rate for each line is the same. In these cases, no ranges are reported. Tariffs for major global import markets are reported on

¹ Because the products and descriptions in the USTR's list are based on HS 2007 nomenclature, the tables in this report use the same nomenclature, notwithstanding 2012 changes to the HS. The "ex" marking in the "ex-out" column indicates products that do not correspond to the entire 6-digit HS subheading, but rather represent only a portion of, or a particular product within, the 6-digit category.

a most-favored-nation (MFN) basis. In some cases, products on the list are already covered wholly or in part by the existing ITA and receive duty-free treatment in ITA markets.

Table 2.2 covers the products that were listed in attachment B to the request letter, which are intended to be covered by the ITA wherever they are classified in the HS. As the products in this list do not have a universally agreed upon set of distinct HS codes, it is not possible to identify specific trade and tariff data for them. To the extent possible, major producing countries are listed for these products.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
321511		Printing ink, black	U.S., China, Japan, EU (Germany), Switzerland	Singapore, Canada, EU (UK, Netherlands), Japan, Mexico	EU (UK, Germany), Singapore, Japan, Canada, Israel	EU U.S. China Malaysia Australia	6.5 1.8 6.5 25.0 5.0	- - - - -	1 1 1 1 1
	ex	Printing ink (black) packaged in the ink jet cartridge	U.S., China, Japan, EU (Germany), Switzerland	Singapore, Canada, EU (Netherlands, UK), Japan, China	Singapore, EU (UK, Germany), Japan, Canada, Israel	EU U.S. China Malaysia Australia	6.5 1.8 6.5 25.0 5.0	- - - - -	1 1 1 1 1
321519		Printing ink, other than black	U.S., China, Japan, EU (Germany), Switzerland	Canada, Singapore, EU (Netherlands, UK), Mexico, Japan	EU (UK, Germany), Singapore, Israel, Japan, Mexico	EU China U.S. Russia Hong Kong	6.5 6.5 1.8 5.0 0	- - - - -	1 1 1 1 1

¹ The following products have been proposed by Members to be subject to the obligations set out in the ITA. Some products in this list may already be covered by the Agreement; the proposals for these items are without prejudice to participants' existing rights and obligations under the ITA and the General Agreement on Tariffs and Trade (GATT 1994).

² Product descriptions in this table are taken directly from the list provided to the USITC by USTR, as supplied by ITA participant countries.

³ In many cases, global production data were unavailable, especially for ex-outs. Global export data was used as a proxy when Commission staff was unable to obtain appropriate production data. GTIS, World Atlas Database (accessed various dates).

⁴ For products noted as ex-outs, in identifying both U.S. export markets and U.S. import sources, trade data for the entire 6-digit subheading were often used when data pertaining to the specific ex-out product were unavailable. Thus, bilateral U.S. trading partners may not precisely represent those for the proposed product but rather for the entire range of products under the 6-digit subheading. Data are from official statistics of the U.S. Department of Commerce (USDOC).

⁵ All tariffs reported are applied, ad valorem rates assessed to countries with most-favored-nation (MFN) status. These data come from WTO and UN COMTRADE databases. These tariffs are based on the 2007 HS and are administered at the 8- and 10-digit levels, which are averaged and reported at the 6-digit level in the WTO database.

⁶ For HS subheadings with only one tariff line, no range is reported. In addition, for HS subheadings with multiple lines where the tariff rate for each line is the same, no range is reported.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
321519— Cont'd	ex	Printing ink (other than black) packaged in the ink jet cartridge	U.S., China, Japan, EU (Germany), Switzerland	Canada, Singapore, EU (Netherlands, UK), Mexico, Japan	EU (UK, Germany) Singapore, Israel, Japan, Mexico	EU China U.S. Russia Hong Kong	6.5 6.5 1.8 5.0 0	– – – – –	1 1 1 1 1
321590		Inks, other than printing ink	U.S., EU (Germany, Netherlands, UK), Japan	EU (Netherlands, UK), Mexico, China, Canada, Thailand	EU (Germany, UK), Japan, Israel, China, Korea	EU China Singapore Korea Switzerland	6.5 8.3 0 6.5 (?)	– 6.5–10.0 – – (?)	1 2 3 11 1
350691	ex	Optically clear free-film adhesives for the manufacture of displays and touch screen panels	EU (Germany), China, Japan, Switzerland	Canada, Mexico, EU (Germany, Belgium), China, Taiwan	EU (Germany, UK), Canada, Japan, Korea, Mexico	EU China Canada Mexico U.S.	6.5 10.0 3.3 11.0 2.1	– – 0–6.5 10.0–15.0 –	1 3 2 5 1
370110		For X-ray (Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	U.S., EU (Belgium, Germany, Netherlands), Japan	EU (Germany, Spain), Japan, Mexico, Brazil, China	EU (Belgium, Germany) Mexico, Japan, Brazil, Chile	EU U.S. Brazil Japan Russia	6.5 3.7 10.0 0 5.0	– – 2.0–14.0 – –	1 1 3 3 2
370130		Other plates and film, with any side exceeding 255 mm	EU (Germany, Belgium, Netherlands), China, Japan	China, Canada, Mexico, EU (Germany, Netherlands), Brazil	EU (Germany, Belgium) Japan, China, Brazil, Taiwan	EU China U.S. Korea Turkey	6.5 20.0 3.7 6.0 6.5	– – – 3.0–6.5 6.5	1 5 1 7 1
370199		Other ((Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	Japan	EU (France, UK), Singapore, Canada, China, Korea	Japan, EU (Belgium, UK), Taiwan, Brazil, Korea	U.S. EU Japan Korea Hong Kong	4.3 6.5 0 5.9 0	3.7–4.9 – – 3.0–6.5 –	2 1 1 6 1

⁷ An ad valorem tariff rate for this country for this HS code was unavailable. As a result, a tariff range was also unavailable.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
370242		Of a width exceeding 610 mm and of a length exceeding 200 m, other than for colour photography (Other film, without perforations, of a width exceeding 105 mm)	Japan, EU (Belgium)	China, EU (Belgium, Spain), Mexico, Brazil, South Africa	Japan, EU (France, Belgium), Korea, China, Malaysia	China U.S. Korea Brazil EU	(?) 3.7 6.5 8.0 6.5	(?) – – 2.0–14.0 –	5 1 7 2 1
370243		Of a width exceeding 610 mm and of a length not exceeding 200 m (Other film, without perforations, of a width exceeding 105 mm)	Japan, EU (Belgium), U.S.	China, Japan, EU (France, Netherlands), Mexico, Korea	Japan, EU (Belgium, UK), Switzerland ⁸	Hong Kong Korea China EU U.S.	0 6.5 (?) 6.5 3.7	– – (?) – –	1 7 3 1 1
370244		Of a width exceeding 105 mm but not exceeding 610 mm (Other film, without perforations, of a width exceeding 105 mm)	EU (Belgium), Japan, U.S.	China, Canada, EU (Netherlands, Belgium), Japan, Mexico	Japan, EU (Belgium, UK), China, Korea, Brazil	EU U.S. China Hong Kong Malaysia	6.5 3.7 (?) 0 0	– – (?) – –	1 1 4 1 1
370590		Other photographic plates and film, exposed and developed, other than motion-picture film, including photomasks and reticules	Japan, U.S., Taiwan, Korea	Taiwan, EU (Ireland, Netherlands), Singapore, Israel, China	Japan, Korea, Taiwan, EU (Germany, France), Canada	Korea Singapore EU U.S. Japan	0.3 0 4.3 0 0	0–3.0 – 3.2–5.3 – –	9 3 2 1 1
370710		Sensitizing emulsions	Japan, China, EU (Belgium, Netherlands)	EU (Belgium, UK), China, Taiwan, Mexico, Canada	EU (Belgium, Germany), Philippines, Japan, China, Korea	China EU Hong Kong Singapore Japan	8.0 6.0 0 0 0	– – – – –	2 1 1 1 1
370790		Other (Chemical preparation for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use)	Japan, U.S., EU (Germany), China	EU (Belgium, Netherlands), Mexico, Taiwan, Japan, Singapore	Japan, EU (Netherlands, Germany), Canada, China, Korea	EU China U.S. Korea Mexico	6.0 11.3 2.7 6.4 0	– 8.0–16.0 0–6.5 5.0–6.5 –	2 3 3 16 2

⁸ The listed countries are the only countries for which U.S. import data were available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
390730	ex	Epoxide resins molding compounds for semiconductor encapsulation	China, EU (Germany), Japan, Taiwan	Canada, China, Mexico, EU (Belgium, Netherlands), Korea	Canada, EU (Germany, Netherlands), Korea, Taiwan, Japan	EU China U.S. Singapore Malaysia	6.5 6.5 3.1 0 0	– – 0–6.1 – –	1 2 2 3 1
	ex	Glass and epoxy, cotton paper and epoxy, phenolic cotton paper and woven glass and epoxy resins for the manufacture of printed circuits	China, EU (Germany), Japan, Taiwan	Canada, China, Mexico, EU (Belgium, Netherlands), Korea	Canada, EU (Germany, Netherlands), Korea, Taiwan, Japan	EU China U.S. Singapore Malaysia	6.5 6.5 3.1 0 0	– – 0–6.1 – –	1 2 2 3 1
392061	ex	Optical films of polycarbonates for the manufacture of LCD / LED displays and screens	Japan, U.S., EU (Germany), China	Canada, EU (Netherlands, Germany), Mexico, China, Australia	EU (Germany, UK), Israel, Canada, China, Japan	EU China Korea Hong Kong U.S.	6.5 6.5 6.5 0 5.8	– – – – –	1 1 1 1 1
392062	ex	Optical films of poly(ethylene terephthalate) for the manufacture of LCD / LED displays and screens	Japan, Korea, U.S., EU (Germany), Taiwan	EU (UK, Germany), Canada, Singapore, China, Taiwan	Oman, Mexico, Korea, EU (UK, Germany), United Arab Emirates	China	6.5	–	1
						EU	4.3	0–6.5	3
						U.S.	4.2	–	1
						Japan	4.8	–	1
						Hong Kong	0	–	1
392190	ex	Other plates, sheets, film, foil and strip of plastics, flexible, not reinforced with paper or combined with textile materials for the manufacture of printed circuits	EU (Germany, Italy), Japan, U.S., China	China, Mexico, EU (Ireland, Germany), Hong Kong, Japan	Canada, EU (UK, Germany), China, Mexico, Korea	EU U.S. China Mexico Russia	6.5 5.3 6.5 0 10.0	– 4.2–6.5 – – –	8 8 4 9 11
392310	ex	Articles of plastic for the conveyance, packing or shipping of semiconductor wafers, masks, and reticles	China, EU (Germany)	Mexico, Canada, EU (UK, Belgium), Japan, China	Canada, China, Taiwan, EU (Germany, UK), Israel	EU	6.5	–	1
						U.S.	3.0	–	1
						Mexico	15.0	–	2
						China	10.0	–	1
						Korea	6.5	–	1
392690	ex	Plastic enclosures or cases for use in goods classified in 85.17	China, EU (Germany)	Mexico, Canada, EU (Germany, UK), China, Japan	China, Canada, Mexico, EU (Germany, UK), Taiwan	EU	6.5	–	3
						U.S.	3.9	0–6.5	28
						Mexico	6.7	0–15.0	36
						China	10.0	–	2
						Japan	2.6	0–3.9	3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
392690— Cont'd	ex	Other articles of plastics for use in telecommunication and ICT devices	China, EU (Germany)	Mexico, Canada, EU (Germany, UK), China, Japan	China, Canada, Mexico, EU (Germany, UK), Taiwan	EU U.S. Mexico China Japan	6.5 3.9 6.7 10.0 2.6	– 0–6.5 0–15.0 – 0–3.9	3 28 36 2 3
481190		Other paper, paperboard, cellulose wadding and webs of cellulose fibres	EU (Germany), U.S., China, Japan	Canada, EU (Belgium, UK), China, Mexico, Brazil	EU (Germany, UK), China, Japan, Canada, Mexico	EU U.S. Canada Turkey Australia	0 0 0 0 3.0	– – – – 0–5.0	1 7 1 3 5
490700	ex	Documents of title, specifically licenses to use software in printed form	U.S., China	EU (Netherlands, UK), Mexico, Japan, Australia, China	Mexico, EU (Germany, UK), China, Canada, Singapore	Ghana Singapore India Yemen EU	0 0 10.0 (⁹) 0	– – – (⁹) –	1 4 4 (⁹) 3
491110	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	U.S., China	Canada, Mexico, EU (UK, France), Australia, Taiwan	Canada, Mexico, EU (Italy, Germany), China, Switzerland	EU Switzerland U.S. Canada Norway	0 0 0 0 0	– – – – –	2 3 1 3 3
491199	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	U.S., China	Canada, EU (Italy, UK), Mexico, Japan, China	China, Canada, EU (Ireland, Germany), Mexico, Singapore	EU U.S. Japan Canada Mexico	0 0 0 0 12.1	– – – – 5.0–15.0	1 3 1 3 7
690310	ex	Graphite or SiC (silicon carbide) crucible for the manufacture of semiconductor devices	Korea, China	EU (Germany, Netherlands), China, Mexico, Canada, Bahrain	EU (Germany, France), Japan, India, China, Brazil	Korea EU U.S. China Norway	7.5 5.0 0 8.0 0	3.0–8.0 – – – –	10 1 1 1 1

⁹ Tariff rates were unavailable in the WTO database.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
690911	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	Korea, China	Canada, China, EU (Germany, UK), Singapore, Taiwan	Japan, China, EU (France, Belgium), Indonesia, Australia	U.S. Japan EU China Canada	2.3 0 5.0 8.0 4.5	0–4.5 – – – –	2 2 1 1 1
690919	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	Korea, China	EU (Germany, UK), Mexico, South Africa, Canada, Korea	China, Russia, Brazil, Japan, EU (Germany, Sweden)	EU U.S. South Africa Korea Japan	5.0 2.0 0 8.0 0	– 0–4.0 – – –	1 2 1 1 2
700220	ex	Unworked glass rods of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	Korea, Taiwan, Japan, China	China, Korea, Japan, Brazil, India	EU (France, Germany), Japan, China, New Zealand, Korea	China EU U.S. Japan Hong Kong	9.0 3.0 3.0 0 0	6.0–12.0 – 0–6.0 – –	2 2 2 1 1
700231	ex	Unworked glass tubes of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	Korea, Taiwan, Japan, China	EU (Germany, Denmark), China, Mexico, Japan, Korea	EU (Germany, Netherlands), China, Japan, Taiwan, Indonesia	China EU U.S. Korea Japan	9.5 3.0 0 5.5 0	5.0–14.0 – – 3.0–8.0 –	2 1 1 2 1
700600		Glass of heading 70.03, 70.04 or 70.05, bent, edge-worked, engraved, drilled, enamelled or otherwise worked, but not framed or fitted with other materials	Korea, Taiwan, Japan, China	Singapore, Canada, EU (Germany, UK), Hong Kong, Mexico	EU (Germany, Belgium), China, Canada, Japan, Mexico	China Japan Korea EU Singapore	15.0 0 4.8 3.0 0	– – 3.0–8.0 – –	2 1 4 2 2
	ex	High purity fused silica plates for the manufacture of photoblanks or photomasks, or otherwise designed for the manufacture or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof, or telecommunications equipment or parts or accessories of any of the foregoing	Korea, Taiwan, Japan, China	Singapore, Canada, EU (Germany, UK), Hong Kong, Mexico	EU (Germany, Belgium), China, Japan, Mexico, Canada	China Japan Korea EU Singapore	15.0 0 4.8 3.0 0	– – 3.0–8.0 – –	2 1 4 2 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
701400	ex	Signaling glassware and optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, integrated circuits or flat panel displays	Taiwan, Japan	EU (Germany, UK), Japan, Afghanistan, Canada, Paraguay	EU (Germany, France), Japan, China, Malaysia, Taiwan	China Japan EU Hong Kong U.S.	15.0 0 3.0 0 4.0	10.0–17.5 – – – 3.3–5.0	3 1 1 1 4
701710	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Korea, Taiwan, Japan, China	EU (Germany, Belgium), Korea, China, Japan, Taiwan	Mexico, EU (UK, Germany), China, Switzerland, Japan	EU U.S. Mexico Japan Singapore	3.0 2.3 2.1 0 0	– 0–4.6 0–5.0 – –	1 2 14 1 2
702000	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	Korea, Taiwan, Japan, China	Taiwan, Korea, EU (Germany, UK), Japan, China	Japan, EU (Germany, France), China, Russia, India	China EU Korea Singapore Malaysia	11.6 3.0 5.0 0 16.7	0–21.0 0–6.0 0–8.0 – 0–30.0	8 6 6 4 3
741011	ex	Copper foil of refined copper not backed of thickness not exceeding 0.15mm designed for printed circuits	China, Taiwan, Japan, Korea	EU (Germany, UK), Mexico, Malaysia, China, Canada	EU (Sweden, Germany), Mexico, Japan, Korea, China	China Hong Kong Korea EU Japan	4.0 0 8.0 5.2 3.0	– – – – –	2 1 1 1 1
741021	ex	Copper clad laminates backed with paper, paperboard, plastics, or similar backing materials of a thickness (excluding any backing) not exceeding 0.15 mm	China, Taiwan, Japan, Korea	EU (Luxembourg, Germany), Hong Kong, Canada, Taiwan, China	Japan, China, Taiwan, Korea, EU (Germany, Belgium)	China Hong Kong Korea EU Japan	4.0 0 8.0 5.2 3.0	– – – – –	2 2 2 1 1
841381		Pumps (Other pumps; liquid elevators)	EU, U.S., China, Taiwan	Canada, EU (Belgium, Germany), Mexico, China, Singapore	EU (Germany, Italy), China, Mexico, Canada, Korea	EU U.S. China Korea Algeria	1.7 0 8.0 8.0 5.0	– – – – –	1 1 1 2 1
841410	ex	Vacuum pumps of a kind used for the production of semiconductors or flat panel displays	EU, Japan, U.S., Korea	EU (UK, Germany), Canada, China, Mexico, Israel	EU (Germany, UK), Mexico, Japan, Korea, Canada	EU U.S. China Korea Japan	1.3 1.3 8.0 6.3 0	0–1.7 0–2.5 – 3.0–8.0 –	4 2 1 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
841459		Other fans	EU, China, U.S., Japan	Canada, EU (UK, Germany), Mexico, China, Australia	EU (Germany, Italy), China, Mexico, Canada, Japan	EU U.S. China Japan Hong Kong	2.3 0.9 8.5 0 0	– 0–2.3 8.0–10	3 5 4 3 2
	ex	Fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	EU, China, U.S., Japan	Canada, EU (Germany, UK), Mexico, China, Australia	China, EU (Germany, Italy), Mexico, Canada, Taiwan	EU U.S. China Japan Hong Kong	2.3 0.9 8.5 0 0	– 0–2.3 8.0–10.0	3 5 4 3 2
841490	ex	Parts of fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	EU, U.S., Japan	Canada, Mexico, EU (France, UK), Venezuela, China	EU (UK, Germany), Canada, China, Mexico, Japan	EU U.S. China Korea Mexico	2.2 0.9 8.8 8.0 0	– 0–4.7 7.0–12.0 – –	1 5 4 4 10
841510	ex	Air conditioning machines which have apparatus for communication in wired or wireless network (of window or wall types, self-contained or "split-system")	China, Thailand, Malaysia	Canada, Venezuela, Mexico, EU (Spain, Poland), Colombia	China, Thailand, Mexico, Korea, Canada	EU Japan U.S. Russia India	2.5 0 0.6 15.0 10.0	2.2–2.7 – 0–2.2 – –	2 2 5 1 2
	ex	Air conditioning machines which can process digital signals or communicate with or without lines	China, Thailand, Malaysia	Canada, Venezuela, Mexico, EU (Spain, Poland), Colombia	China, Thailand, Mexico, Korea, Canada	EU Japan U.S. Russia India	2.5 0 0.6 15.0 10.0	2.2–2.7 – 0–2.2 – –	2 2 5 1 2
841810	ex	Combined refrigerator–freezers, fitted with separate external doors which can process digital signals or communicate with or without lines	Mexico, Korea, China	Canada, EU (UK, Italy), Venezuela, Mexico, Australia	Mexico, Korea, China, Turkey, EU (Austria, Germany)	U.S. EU Japan Canada Russia	0 1.9 0 4.0 20.0	– – – 0–8.0 –	1 2 1 2 5
841821	ex	Household type and compression-type refrigerators which have apparatus for communication in wired or wireless network	China, Thailand, Turkey, Mexico, EU	Canada, Saudi Arabia, United Arab Emirates, Venezuela, Dominican Republic	China, Mexico, EU (Slovenia, Italy), Turkey, Korea	EU U.S. Malaysia Switzerland Canada	2.1 0 30.0 (?) 8.0	1.5–2.5 – – (?) –	5 1 4 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
841821— Cont'd	ex	Refrigerators, household type : Compression-type, which can process digital signals or communicate with or without lines	China, Thailand, Turkey, Mexico, EU	Canada, Saudi Arabia, United Arab Emirates, Venezuela, Dominican Republic	China, Mexico, EU (Slovenia, Italy), Turkey, Korea	EU U.S. Malaysia Switzerland Canada	2.1 0 30.0 (?) 8.0	1.5–2.5 – – (?) –	5 1 4 1 1
841829	ex	Refrigerators, household type : not compression-type, which can process digital signals or communicate with or without lines	China, EU, Singapore, U.S.	Dominican Republic, Venezuela, Canada, Mexico, EU (UK, Germany)	China, EU (Germany, Hungary), Korea, Japan, Mexico	EU Singapore U.S. South Africa Namibia	2.2 0 1.5 25.0 25.0	– – 1.0–1.9 – –	1 1 2 1 1
841899	ex	Parts of house hold type refrigerators, freezers and other refrigerating or freezing equipment electric or other; heat pumps, where the parts are related to the functions that process digital signals or communicate with or without lines.	China, EU, U.S., Korea	Mexico, EU (Germany, UK), Canada, China, Japan	Mexico, China, EU (Italy, Germany), Canada, Japan	EU U.S. Mexico Singapore Japan	2.2 0 0 0 0	– – – – –	2 2 5 4 1
841939	ex	Spin dryers for machines and mechanical appliances for making semiconductors, flat panel displays and PCAs	EU, Japan, China, U.S.	EU (Ireland, Sweden), Canada, Mexico, Korea, India	EU (Germany, Italy), China, Korea, Japan, Canada	China EU U.S. Russia Korea	9.0 1.7 0 10.0 5.5	– – – – 3.0–8.0	3 1 1 2 2
841950	ex	Heat exchange units to be used for the production of semiconductors and flat panel displays	EU, U.S., Japan, Korea	Canada, EU (Belgium, Germany), Mexico, China, Korea	EU (Germany, UK), Mexico, Canada, China	EU China U.S. Canada Russia	1.7 10.0 1.4 0 10.0	– – 0–4.2 – –	1 1 3 1 2
842010	ex	Roll laminators and laminate presses of a kind used for the production of printed circuits	China, EU (Germany), U.S., Taiwan, Japan	Korea, EU (Ireland, France), Canada, Mexico, Brazil	China, EU (Italy, Germany), Korea, Canada, Japan	China U.S. EU Russia Brazil	8.4 1.2 1.7 10.0 14.0	– 0–3.5 – – –	2 3 3 4 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
842129	ex	Liquid filtering equipment for semiconductor and flat panel display manufacturing	EU, U.S., Japan	EU (France, UK), Canada, Mexico, China, Japan	EU (Ireland, Germany), Japan, Mexico, Canada, China	EU China U.S. Canada Mexico	1.7 5.0 0 0 2.5	– – – – 0–15.0	1 2 1 1 8
842139	ex	Gas filtering equipment for semiconductor and flat panel display manufacturing	EU, U.S., China, Japan	Canada, EU (Belgium, Germany), Mexico, China, Korea	Mexico, EU (Germany, UK), China, Canada, Dominican Republic	EU U.S. China Russia Mexico	1.7 0 6.3 10.0 3.9	– – 5.0–15.0 – 0–15.0	3 2 8 5 9
842199	ex	Parts of filtering equipment for semiconductor and flat panel display manufacturing	EU, Israel, Japan, Taiwan, U.S.	EU (France, Germany), Canada, China, Mexico, Japan	EU (Germany, UK), Canada, China, Japan, Korea	EU U.S. China Japan Korea	1.7 0 7.5 0 6.4	– – 5.0–10.0 – 0–8.0	1 1 2 2 5
842489	ex	Spraying apparatus for etching, developing, stripping, or cleaning; or application of coating or sealants manufacture of printed circuits or printed circuit assemblies	EU (Germany), China, Taiwan, U.S., Japan	EU (Luxembourg, Netherlands), Canada, China, Mexico, Australia	China, Mexico, EU (Germany, Czech Republic), Japan, Canada	EU China U.S. Russia Brazil	1.7 0 1.8 6.7 10.0	– – – 5.0–10.0 0–16.0	1 3 1 3 3
842490	ex	Parts for spraying apparatus for etching, developing, stripping or cleaning; or application of coating or sealants for the manufacture of printed circuits or printed circuit assemblies	EU (Germany), China, Taiwan, U.S., Japan	None reported	China, EU (Germany, UK), Japan, Mexico, Taiwan	EU U.S. China Canada Russia	1.7 0.7 0 0 5.0	– 0–2.9 – – –	1 4 3 1 1
842890	ex	Other machines for lifting, handling, loading or unloading printed circuits or substrates for the manufacture of printed circuit or printed circuit assemblies	EU (Germany), China, Taiwan, U.S., Japan	Canada, EU (Belgium, UK), Mexico, Australia, China	Mexico, EU (Germany, Italy), Canada, Japan, China	EU U.S. Russia China Australia	0 0 5.0 6.7 5.0	– – – 5.0–10.0 –	3 1 7 3 2
843139	ex	Hard disk process carriers, transport carriers and similar items specially designed for the manufacturing, transport, or storage of hard disk drive components	Japan, Korea, U.S., EU (Germany)	Mexico, Canada, EU (UK, Sweden), China, United Arab Emirates	EU (Germany, Italy), Canada, Mexico, China, Japan	EU U.S. Canada Australia Russia	0 0 0 5.0 5.0	– – – – –	1 1 1 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
844230		Machinery, apparatus, and equipment	EU (Belgium, UK), China, U.S.	EU (Germany, UK), Venezuela, Afghanistan, Japan, Mexico	EU (Germany, Slovak Republic), China, Mexico, Japan, Switzerland	EU U.S. China Brazil Korea	1.1 0 9.0 8.0 8.0	0–1.7 – – 0–14.0 –	3 1 4 3 6
844240		Parts of the foregoing machinery, apparatus, or equipment	Malaysia, U.S., EU (Belgium, Germany, Denmark), Canada	EU (Belgium, UK), Venezuela, Colombia, Canada, China	EU (Germany, Belgium), China, Canada, Japan, Israel	EU U.S. China Mexico Hong Kong	1.7 0 7.0 0 0	– – – – –	1 1 2 1 1
844250		Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)	EU (Germany, Belgium), Switzerland, U.S., China	Canada, EU (Netherlands, UK), Mexico, Venezuela, China	Canada, EU (Germany, Italy), Brazil, Israel, Japan	EU Switzerland Russia India U.S.	1.7 (?) 5.0 7.5 2.0	– (?) – – 0–4.0	2 2 4 7 2
	ex	Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits	EU (Germany, Belgium), Switzerland, U.S., China	Canada, EU (Netherlands, UK), Mexico, Venezuela, China	Canada, EU (Germany, Italy), Brazil, Israel, Japan	EU Switzerland Russia India U.S.	1.7 (?) 5.0 7.5 2.0	– (?) – – 0–4.0	2 2 4 7 2
	ex	Plates for applying solder, flex adhesive, or sealants to printed circuits	EU (Germany, Belgium), Switzerland, U.S., China	Canada, EU (Netherlands, UK), Mexico, Venezuela, China	Canada, EU (Germany, Italy), Brazil, Israel, Japan	EU Switzerland Russia India U.S.	1.7 (?) 5.0 7.5 2.0	– (?) – – 0–4.0	2 2 4 7 2
844319		Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442)	EU, Israel, Japan, Taiwan, U.S.	EU (Belgium, Germany), Mexico, Brazil, Canada, Hong Kong	Israel, EU (UK, Germany), Switzerland, China, Japan	EU China U.S. Brazil India	1.1 9.7 1.3 14.0 7.5	0–1.7 8.0–10.0 0–2.6 – –	3 6 2 2 6
844331		Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data-processing machine or to a network	China, EU (Netherlands, Germany, France), Thailand, Hong Kong, Indonesia	Mexico, Canada, Brazil, Hong Kong, Chile	China, Japan, Vietnam, Korea, Indonesia	EU U.S. Japan Hong Kong Australia	2.0 0 0 0 0	0–6.0 – – – –	3 1 2 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
844332		Other, capable of connecting to an automatic data processing machine or to a network (Other printers, copying machines, and facsimile machines, whether or not combined)	China, EU (Netherlands, Germany, France), U.S., Vietnam, Japan	EU (Netherlands, Germany), Mexico, Brazil, Canada, China	China, Japan, Vietnam, EU (Germany, UK), Malaysia	EU U.S. China Hong Kong Japan	1.6 0 3.6 0 0	0–6.0 – 0–8.0 – –	5 2 11 4 2
	ex	Screen printing machinery for the manufacture of printed circuit boards or printed wiring boards	China, EU (Netherlands, Germany, France), U.S., Vietnam, Japan	EU (Netherlands, Germany), Mexico, Canada, Brazil, China	China, Japan, Vietnam, EU (UK, France), Indonesia	EU U.S. China Hong Kong Japan	1.6 0 3.6 0 0	0–6.0 – 0–8.0 – –	5 2 11 4 2
844339		Other (Other printers, copying machines and facsimile machines, whether or not combined)	Singapore, U.S., EU (Austria, Germany), China	Panama, Uruguay, Hong Kong, Brazil, Mexico	China, EU (Austria, Italy), Japan, Malaysia, Switzerland	EU Singapore Japan U.S. Panama	2.8 0 0 1.0 0	0–6.0 – – 0–3.7 –	4 6 3 7 2
844391		Parts and accessories of printing machinery used for printing by means of plates, cylinders, and other printing components of heading 8442.	EU, U.S., Switzerland	EU (Germany, Netherlands), Canada, China, Mexico, Israel	EU (Germany, UK), Japan, Israel, Switzerland, Canada	EU Indonesia U.S. Malaysia Hong Kong	1.1 5.0 0.9 0 0	0–1.7 – 0–2.6 – –	3 1 3 1 1
	ex	Parts of Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits; Parts of plates for applying solder, flex adhesive, or sealants to printed circuits	EU, U.S., Switzerland	EU (Germany, Netherlands), Canada, China, Mexico, Israel	EU (Germany, UK), Japan, Israel, Switzerland, Canada	EU Indonesia U.S. Malaysia Hong Kong	1.1 5.0 0.9 0 0	0–1.7 – 0–2.6 – –	3 1 3 1 1
844399		Parts and Accessories, Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof)	Japan, China, Hong Kong, EU (Germany, Netherlands, Italy)	EU (Netherlands, UK), Mexico, Canada, Brazil, Venezuela	Japan, China, Singapore, EU (Ireland, Netherlands), Mexico	EU U.S. Hong Kong China Singapore	0 0 0 6.0 0	– – – 0–12.0 –	2 8 1 5 4

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
845011	ex	Fully-automatic household or laundry-type washing machines which have apparatus for communication in wired or wireless network	China, EU, Turkey	Mexico, Canada, Saudi Arabia, Australia, EU (UK, Belgium)	China, Mexico, EU (Germany, Sweden), Korea, Thailand	EU Japan Russia Australia U.S.	2.9 0 15.0 5.0 1.4	2.6–3.0 – – – –	3 1 3 1 1
	ex	Household or laundry-type fully-automatic washing machines, which can process digital signals or communicate with or without lines	China, EU, Turkey	Mexico, Canada, Saudi Arabia, Australia, EU (UK, Belgium)	China, Mexico, EU (Germany, Sweden), Korea, Thailand	EU Japan Russia Australia U.S.	2.9 0 15.0 5.0 1.4	2.6–3.0 – – – –	3 1 3 1 1
845012	ex	Household or laundry-type washing machines, which can process digital signals or communicate with or without lines	China, Thailand, Korea	Jamaica, Venezuela, Panama, Korea, Saudi Arabia	China, EU (Italy, Spain), Turkey, Korea ¹⁰	Indonesia EU Japan Malaysia Russia	7.5 2.7 0 15.0 15.0	5.0–10.0 – – 5.0–25.0 –	2 1 1 2 1
845019	ex	Household or laundry-type washing machines, including machines which both wash and dry, which can process digital signals or communicate with or without lines	Thailand, China, EU	Mexico, Venezuela, Australia, EU (UK, France), Trinidad and Tobago	China, Thailand, Korea, EU (Germany, Italy), Mexico	EU India Singapore Egypt Paraguay	2.7 10.0 0 30.0 20.0	– – – – –	1 1 1 3 1
845090	ex	Parts of household or laundry-type washing machines, where the parts are related to the functions that process digital signals or communicate with or without lines.	China, Korea, EU	Mexico, Canada, EU (UK, Germany), Saudi Arabia, Colombia	Korea, EU (Germany, Italy), China, Mexico, Taiwan	EU Thailand U.S. Japan Russia	2.7 20.0 2.6 0 10.0	– 10.0–30.0 – – –	1 2 3 1 1
845610	ex	Machine tools operated by laser or other light or photo beam processes for drilling, routing, or marking printed circuit substrates or printed circuits	Japan, EU (Germany), U.S., Korea, Taiwan	EU (Germany, France), Mexico, China, Japan, Canada	EU (Germany, UK), Japan, Singapore, China, Israel	EU China U.S. Korea Russia	4.5 0 3.0 8.0 12.5	– – 2.4–3.5 – 10.0–15.0	1 1 2 2 2
	ex	Machine tools operated by laser or other light or photo beam processes for use in cutting process or drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	Japan, EU (Germany), U.S., Korea, Taiwan	EU (Germany, France), Mexico, China, Japan, Canada	Japan, EU (Germany, Italy), Switzerland, China, Korea	EU China U.S. Korea Russia	4.5 0 3.0 8.0 12.5	– – 2.4–3.5 – 10.0–15.0	1 1 2 2 2
845620	ex	Machine-tools operated by ultrasonic processes for use in machining printed circuits, parts of mobile devices, semiconductor or flat panel displays.	Japan, EU (Germany), U.S., Korea, Taiwan	EU (Germany, Austria), Japan, Canada, Australia, Mexico	EU (UK, Germany), Korea, Chile, China, Japan	EU Malaysia China Switzerland Thailand	3.5 0 10.0 (?) 1.0	– – – (?) –	1 1 1 3 1

¹⁰ The listed countries are the only countries for which U.S. import data were available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
845630	ex	Machine tools operated by electro-discharge processes for cutting wafers	Japan	EU (Germany, UK), Canada, Malaysia, China, Mexico	EU (Germany, UK), Thailand, Canada, Switzerland, China	EU China U.S. Korea Russia	3.5 9.9 3.0 8.0 15.0	– 9.7–10.0 2.4–3.5 – –	3 2 2 3 3
845690	ex	Plasma cleaner machines that remove organic contaminants from electron microscopy specimens and specimen holders in semiconductor production process	Japan, EU (Germany), U.S., Taiwan, China	Canada, China, Malaysia, EU (Germany, UK), Hong Kong	EU (Germany, UK), Mexico, Japan, Canada, Switzerland	EU China U.S. Thailand Canada	3.5 0 2.9 1.0 0	– – 2.2–3.5 – –	1 2 2 3 1
845710	ex	Machining centres of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Japan, EU (Germany), U.S., Korea, China	EU (Belgium, Finland), Mexico, Canada, Brazil, Russia	Japan, EU (Germany, Italy), Taiwan, Korea, Singapore	China EU U.S. Korea Russia	9.7 2.7 4.2 8.0 10.0	– – – – 5.0–15.0	4 2 1 4 4
845811	ex	Numerically controlled (horizontal lathes) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Japan, EU (Germany), Switzerland, U.S., Korea	Canada, Mexico, EU (Germany, UK), China, Korea	Japan, Korea, Taiwan, Thailand, EU (Germany, Italy)	EU U.S. China Turkey Russia	2.7 4.4 9.7 2.7 15.0	– – – – –	4 1 1 4 5
845891	ex	Numerically controlled (other lathes) of a kind used for the production of parts of mobile devices, PC, semiconductor and flat panel displays.	Japan, EU (Germany), Switzerland, Korea, Taiwan	India, Mexico, China, EU (Romania, Germany), Russia	Japan, EU (Germany, Italy), Korea, Taiwan, Canada	China EU U.S. Russia Turkey	5.0 2.7 4.3 15.0 2.7	– – 4.2–4.4 – –	1 2 2 2 2
845921	ex	Numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	EU (Germany, Italy), Japan, Korea, Taiwan	Canada, EU (UK, France), Brazil, Russia, Australia	EU (Spain, Germany), Japan, Canada, Israel, China	China EU Canada Thailand U.S.	9.7 2.7 0 1.0 4.2	– – – – –	1 1 2 1 1
845961	ex	Numerically controlled (Other milling machines) numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	Japan, Taiwan, U.S., EU (Germany, Italy)	China, EU (Germany, Belgium), Mexico, Russia, Korea	EU (Germany, Austria), Japan, Switzerland, Taiwan, Canada	China EU U.S. Hong Kong Korea	5.0 2.7 4.2 0 8.0	– – – – –	2 2 1 1 3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
846150	ex	Sawing or cutting-off machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	China, U.S., Thailand, EU (Germany), Korea	Canada, EU (Germany, Finland), Mexico, Singapore, Saudi Arabia	EU (Germany, Italy), China, Taiwan, Japan, Canada	EU China U.S. Thailand Russia	1.7 12.0 4.4 1.0 15.0	– – – – –	3 1 2 2 3
846210	ex	Forging or die-stamping machines (including presses) and hammers of a kind used for the production of parts of mobile devices, automatic data processing machines.	EU (Italy, Germany), Japan, Taiwan, U.S.	China, EU (Germany, UK), Mexico, Brazil, Korea	Japan, Korea, EU (Italy, UK), Canada, Taiwan	China EU Thailand U.S. Mexico	10.9 2.2 5.0 4.4 7.5	9.7–12.0 1.7–2.7 – – 0–15.0	2 2 2 1 2
846221	ex	Numerically controlled (Bending, folding, straightening or flattening machines (including presses)) of a kind used for the production of parts of mobile devices, automatic data processing machines.	EU (Germany, Italy, Austria), Japan, Switzerland	Mexico, Russia, Canada, China, EU (Belgium, UK)	EU (Germany, Austria), Japan, Switzerland, Canada, Taiwan	EU China Russia U.S. Brazil	2.7 9.7 15.0 4.4 14.0	– – – – –	2 2 2 1 1
846592	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits	EU (Germany), Japan, Taiwan, U.S., China	Canada, EU (Belgium, UK), China, Venezuela, Japan	EU (Germany, Italy), Canada, Japan, China, Taiwan	EU U.S. China Russia Canada	2.7 3.0 10.0 10.0 0	– – – – –	1 1 1 1 1
	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits, or parts of mobile devices, automatic data processing machines, or flat panel displays.	EU (Germany), Japan, Taiwan, U.S., China	Canada, EU (Belgium, UK), China, Venezuela, Japan	EU (Germany, Italy), Canada, Japan, China, Taiwan	EU U.S. China Russia Canada	2.7 3.0 10.0 10.0 0	– – – – –	1 1 1 1 1
846593	ex	Grinding, sanding or polishing machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	EU (Germany), Japan, Taiwan, U.S., China	India, EU (Ireland, Germany), Venezuela, Korea, Brazil	EU (Germany, Italy), Japan, China, Korea, Canada	U.S. EU China India Canada	3.0 2.7 10.0 7.5 0	– – – – –	1 1 1 1 1
846595	ex	Drilling machines for drilling holes in printed circuits or printed circuit laminate	EU (Germany), Japan, Taiwan, U.S., China	Vietnam, Hong Kong, Mexico, Canada, EU (UK, Hungary)	Japan, EU (Italy, Germany), China, Canada, Taiwan	China EU Hong Kong Korea U.S.	10.0 2.7 0 8.0 3.0	– – – – –	1 1 1 2 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
846595— Cont'd	ex	Drilling or mortising machines for use in drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	EU (Germany), Japan, Taiwan, U.S., China	Vietnam, Hong Kong, Mexico, Canada, EU (UK, Hungary)	Japan, EU (Italy, Germany), China, Canada, Taiwan	China EU Hong Kong Korea U.S.	10.0 2.7 0 8.0 3.0	— — — — —	1 1 1 2 1
846900		Typewriters other than printers of heading 84.43; wordprocessing machines.	China, U.S., Malaysia, EU (UK, Netherlands, Italy)	India, South Africa, Canada, Mexico, EU (France, UK)	Malaysia, India, EU (UK, Poland), Indonesia, South Africa	EU U.S. Hong Kong Malaysia Japan	1.6 0 0 0 0	0–2.5 — — — —	3 1 1 2 1
847210		Duplicating machines	U.S., Japan, EU (UK, France, Netherlands), Canada	China, Mexico, Hong Kong, India, EU (Germany, UK)	China, Japan, EU (Sweden, Germany), Taiwan, Malaysia	EU U.S. Thailand Guatemala Egypt	2.0 1.6 20.0 0 5.0	— — — — —	1 1 2 1 1
847230		Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps	EU (France, Germany, Netherlands), Japan, U.S.	EU (Germany, Belgium), Canada, Switzerland, Brazil, Japan	EU (Netherlands, Germany), Mexico, Switzerland, Canada, China	EU U.S. Canada Japan Switzerland	2.2 1.8 0 0 (?)	— — — — (?)	1 1 1 1 1
847290	ex	Automatic banknote dispensers, coinsorting machines, coin-counting, and other currency coin handling machines	U.S., China, Hong Kong, Russia, Japan	EU (UK, Germany), Canada, Venezuela, Australia, Hong Kong	China, EU (Germany, Sweden), Japan, Taiwan, Canada	EU U.S. Hong Kong Russia Japan	1.5 1.3 0 10.0 0	0–2.2 0–2.6 — — —	3 5 1 2 1
847310		Parts and accessories of the machines of heading 84.69	EU (Netherlands, UK, Spain), U.S., Malaysia	Mexico, EU (UK, Germany), Venezuela, Argentina, Colombia	China, EU (UK, Germany), Canada, Singapore, Thailand	Chile EU U.S. Singapore Hong Kong	6.0 1.0 1.5 0 0	— 0–3.0 0–2.0 — —	1 3 4 2 1
847340		Parts and accessories of the machines of heading 8472	Hong Kong, Japan, China, EU (Germany, Belgium, UK), U.S.	EU (UK, Hungary), Mexico, Canada, Hong Kong, China	EU (Germany, UK), Korea, India, Japan, China	EU Hong Kong U.S. China Japan	1.0 0 1.0 10.5 0	0–3.0 — 0–1.9 — —	3 1 2 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
847340— Cont'd	ex	Parts and accessories of the machines of heading 847210, automatic banknote dispensers, coinsorting machines, coin-counting in 847290, and other currency coin handling machines, and automatic teller machines in 847290	Hong Kong, Japan, China, EU (Germany, Belgium, UK), U.S.	EU (UK, Hungary), Mexico, Canada, Hong Kong, China	EU (Germany, UK), Korea, India, Japan, China	EU Hong Kong U.S. China Japan	1.0 0 1.0 10.5 0	0–3.0 – 0–1.9 – –	3 1 2 3 1
847521		Machines for making optical fibers and preforms thereof	U.S., Japan, EU (UK, Germany), China	EU (Spain, Germany), India, Korea, Colombia, Belarus	EU (UK, Finland), Israel, Japan, Canada, Brazil	China India EU U.S. Russia	10.0 7.5 1.7 0 5.0	– – – – –	1 1 1 1 1
847590	ex	Parts for machines described in 8475.21	U.S., Japan, EU (UK, Germany), China	Taiwan, China, Brazil, Japan, Korea	EU (Germany, France), Mexico, China, Colombia, Bahrain	EU U.S. China Mexico Japan	1.7 0 8.0 0 0	– – – – –	1 2 1 1 1
847689	ex	Money changing machines	EU, U.S., Canada, Taiwan, China	Canada, EU (Sweden, Italy), Australia, Brazil, Mexico	China, Canada, EU (Spain, UK), Singapore, Mexico	EU U.S. Japan Canada Australia	1.7 0 0 3.0 5.0	– – – 0–6.0 –	1 1 1 2 1
847690	ex	Parts of money-changing machines and DVD vending kiosks	China, EU, U.S., Canada, Mexico	Canada, EU (UK, Germany), Australia, Mexico, China	China, Mexico, Taiwan, EU (Italy, Germany), India	EU Japan U.S. Hong Kong China	1.7 0 0 0 10.0	– – – – –	1 1 1 1 1
847950		Industrial robots, not elsewhere specified or included	Japan, Korea, China, U.S., EU (Germany)	EU (Germany, Sweden), Canada, Mexico, Brazil, China	EU (Germany, France), Japan, Canada, Korea, China	EU China U.S. Korea Brazil	1.7 0 2.5 8.0 14.0	– – – – –	1 2 1 3 1
847982	ex	Mixing, kneading or stirring machines, specifically machines for mixing etchant solutions for printed circuit assemblies	EU (Germany), Japan, Taiwan, U.S., China	Canada, EU (Netherlands, Germany), China, Japan, Mexico	EU (Germany, Italy), Canada, China, Argentina, Switzerland	EU China Russia U.S. Korea	1.7 7.0 5.0 0 8.0	– – – – –	1 1 1 1 5

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
847989	ex	Machines and mechanical appliances having individual functions which have apparatus for communication in wired or wireless network (not specified or included elsewhere in Chapter 84, other than those of subheadings 8479.10 to 8479.82)	EU (Germany), Japan, Taiwan, U.S., China	EU (UK, Germany), Canada, Mexico, China, Singapore	Canada, China, EU, (Italy, UK), Mexico, Japan	China EU U.S. Russia Korea	0 1.7 0.8 5.0 8.0	– – 0–2.8 – –	9 3 10 7 12
	ex	Automated electronic component placement machines for the manufacture of printed circuit assemblies	Japan, U.S., Taiwan, China, EU (Germany)	EU (UK, Germany), Canada, Mexico, China, Singapore	Canada, China, EU, (Italy, UK), Mexico, Japan	China EU U.S. Russia Korea	0 1.7 0.8 5.0 8.0	– – 0–2.8 – –	9 3 10 7 12
847990	ex	Parts for automated electronic component placement machines for the manufacture of printed circuit assemblies in subheading 847989	Japan, U.S., Taiwan, China, EU (Germany)	Canada, EU (Germany, UK), Mexico, Singapore, China	EU (Germany, UK), China, Japan, Canada, Mexico	EU U.S. Singapore Korea China	1.7 0 0 8.0 0	– – – – –	2 7 3 14 3
	ex	Parts for covered articles in heading 8479	Japan, U.S., Taiwan, China, EU (Germany)	Canada, EU (UK, Germany), Mexico, Singapore, China	EU (Germany, UK), China, Japan, Canada, Mexico	EU U.S. Singapore Korea China	1.7 0 0 8.0 0	– – – – –	2 7 3 14 3
848071	ex	Injection and compression moulds for the manufacture of semiconductor devices	Japan, U.S., Taiwan, China, Singapore	Mexico, EU (Hungary, Netherlands), China, Hong Kong, Korea	EU (Germany, UK), China, Canada, Hong Kong, Taiwan	EU U.S. China Mexico Japan	1.7 1.0 0 0 0	– 0–3.1 – – –	1 3 1 3 1
848110	ex	Pressure -reducing valves of a kind used for the production of semiconductor and flat panel display	EU, U.S., Japan, China, Mexico	Canada, EU (UK, Germany), China, Mexico, Japan	Mexico, EU (Germany, Italy), China, Japan, Korea	EU China U.S. Canada Japan	2.2 5.0 2.0 0 0	– – – – –	3 2 1 1 1
848130	ex	Check (nonreturn) valves of a kind used for the production of semiconductor and flat panel display	EU, U.S., China, Japan	Canada, EU (UK, Germany), Mexico, China, Singapore	EU (Germany, Italy), China, Mexico, Canada, Japan	EU China U.S. Mexico Canada	2.2 5.0 3.7 1.3 0	– – 3.0–5.0 0–5.0 –	2 1 3 4 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—*Continued*

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
848140	ex	Safety and release valves of a kind used for the production of semiconductor and flat panel display	U.S., EU, Japan, Switzerland, Mexico	Korea, Canada, EU (UK, Germany), China, Mexico	EU (France, Germany), Mexico, Canada, China, Taiwan	EU U.S. China Canada Mexico	2.2 2.0 5.0 0 1.0	– – – – 0–5.0	2 1 1 1 5
848180	ex	Hand operated-valves of a kind used for the production of semiconductor and flat panel display manufacturing	EU, China, U.S., Japan	Canada, EU (Germany, UK), Mexico, China, Korea	China, EU (Germany, Italy), Mexico, Japan, Canada	EU U.S. China Canada Russia	2.2 3.7 6.0 0 11.4	– 2.0–5.6 5.0–7.0 – 5.0–15.0	17 4 2 1 25
848190	ex	Parts of covered valves	China, EU, U.S., Japan, Taiwan	Mexico, Canada, EU (UK, France), China, Singapore	China, EU (Germany, Italy), Japan, Taiwan, Mexico	EU U.S. China Mexico Canada	2.2 2.8 8.0 0 0	– 0–5.0 – – –	1 4 2 5 1
848610		Machines and apparatus for the manufacture of boules or wafers	Japan, Switzerland, EU (Germany), U.S., Korea	China, Taiwan, Korea, EU (Germany, UK), Malaysia	EU (Germany, Denmark), Japan, Singapore, Switzerland, Korea	China Korea Singapore EU Malaysia	0 2.5 0 0 0	– 0–8.0 – – –	5 13 7 1 6
848620		Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	Japan, EU (Netherlands, Germany), U.S., Korea	Korea, Taiwan, EU (Germany, France), China, Japan	Japan, EU (Netherlands, UK), Singapore, Korea, China	China Korea U.S. EU Japan	0 1.7 0 1.8 0	– 0–8.0 – 0–3.5 –	10 33 1 2 1
848630		Machines and apparatus for the manufacture of flat panel displays	Japan, Korea, Taiwan, China	China, Taiwan, Korea, EU (Germany, UK), Singapore	Japan, Canada, China, Switzerland, Korea	China Korea Hong Kong Singapore EU	1.1 7.0 0 0 0	0–10.0 0–8.0 – – –	9 27 1 4 4
848640		Machines and apparatus specified in Note 9(C) to this Chapter	Singapore, Japan, Hong Kong, Korea, EU (Germany)	EU (Netherlands, Germany), Korea, Taiwan, Singapore, China	Japan, Singapore, EU (Germany, Austria), China, Korea	China Korea U.S. Singapore EU	3.0 3.2 0 0 0	0–8.0 0–8.0 – – –	6 21 1 8 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
848690		Parts and accessories (Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in Note 9 (C) to this chapter; parts and accessories)	Japan, EU (Netherlands, Germany), U.S., Korea	EU (Netherlands, Germany), Korea, Taiwan, Singapore, Japan	Japan, EU (Netherlands, Germany), China, Singapore, Korea	U.S. EU Korea Singapore China	0 0.3 4.4 0 3.7	– 0–1.2 0–8.0 – 0–6.0	1 8 9 31 3
850110		Motors of an output not exceeding 37.5 W	China, Japan, EU (Germany)	EU (Germany, UK), Canada, Mexico, Japan, China	Mexico, China, Japan, Switzerland, EU (Germany, Austria)	EU Hong Kong U.S. China Japan	3.2 0 4.6 12.1 0	2.7–4.7 – 2.8–6.7 9.0–24.5 –	4 3 3 5 4
850151		Of an output not exceeding 750 W (Other AC motors, multi-phase)	Japan, EU (Germany), China	Canada, EU (Italy, Germany), Mexico, China, Australia	Mexico, EU (Germany, Italy), China, Japan, Canada	EU U.S. China Korea Japan	2.7 1.8 5.0 8.0 0	– 0–3.3 – – –	1 6 1 1 1
850152		Of an output exceeding 750 W but not exceeding 75 kW (Other AC motors, multi-phase)	EU (Germany, Italy), China, Japan	Canada, Mexico, EU (Germany, Belgium), China, Korea	Mexico, EU (Germany, Italy), China, Brazil, Japan	EU U.S. China Japan Korea	2.7 1.2 10.0 0 8.0	– 0–3.7 – – –	3 3 1 1 1
850163		Of an output exceeding 375 kVA but not exceeding 750 kVA (AC generators (alternators))	EU, U.S., China	EU (Netherlands, UK), Hong Kong, Panama, Canada, United Arab Emirates	Mexico, EU (UK, Austria), Canada, Taiwan, Brazil	EU U.S. Turkey Korea China	2.7 1.3 1.4 4.0 12.0	– 0–2.5 0–2.7 0–8.0 –	1 2 2 2 1
850164		Of an output exceeding 750 kVA (AC generators (alternators))	China, EU (Spain), U.S.	Korea, EU (Greece, Ireland), India, Saudi Arabia, Senegal	EU (Spain, Germany), Japan, Vietnam, Mexico, China	EU U.S. China Turkey Korea	2.7 2.4 8.0 2.7 0	– – 5.8–10.0 – –	1 1 4 1 1
850300		Parts suitable for use solely or principally with the machines of heading 8501 or 8502	EU (Germany, Spain), China, U.S., Japan	Mexico, EU (UK, Germany), Canada, Korea, Saudi Arabia	EU (Germany, UK), China, Mexico, Japan, Canada	EU U.S. China Mexico India	2.7 3.1 6.5 0 7.5	– 0–6.5 3.0–12.0 – –	3 7 4 7 4

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
850410		Ballasts for discharge lamps or tubes	China, EU (Germany), Mexico	Mexico, Canada, China, EU (Germany, UK), Saudi Arabia	Mexico, China, EU (Italy, Germany), Japan, India	EU U.S. Mexico Canada Japan	3.7 1.5 2.5 0 0	– 0–3.0 0–5.0 – –	2 2 2 1 1
850421		Having a power handling capacity not exceeding 650 kVA (Liquid dielectric transformers)	U.S., EU (France), China, India, Mexico	Canada, Venezuela, Mexico, EU (UK, Italy), Japan	Mexico, Canada, EU (Germany, France), China, Korea	EU U.S. Algeria Canada Japan	3.7 0 5.0 0 0	– – – – –	1 1 1 1 3
850422		Having a power handling capacity exceeding 650kVA but not exceeding 10,000 kVA (Liquid dielectric transformers)	EU (France, Belgium), U.S., China	Canada, Mexico, EU (UK, Spain), Australia, Japan	Mexico, Canada, Taiwan, EU (UK, Belgium), Korea	EU U.S. Canada Russia India	3.7 0 0 15.0 7.5	– – – – –	2 1 1 2 1
850423		Having a power handling capacity exceeding 10,000 kVA (Liquid dielectric transformers)	EU (Germany), China, Korea, Japan, India	Canada, Japan, Ghana, Korea, EU (Netherlands, Spain)	Korea, EU (Austria, Netherlands), Mexico, Canada, Japan	U.S. EU Russia Canada Algeria	1.6 3.7 10.0 0 5.0	– – – – –	1 1 1 1 1
850431		Having a power handling capacity not exceeding 1 kVA (Other transformers)	China, EU (Germany), U.S., Japan	Mexico, Canada, EU (UK, Germany), China, Japan	China, Mexico, EU (Germany, UK), Canada, India	EU Hong Kong U.S. Japan Mexico	3.7 0 1.6 0 1.4	– – 0–6.6 – 0–5.0	3 2 5 1 7
850432	ex	Transformers having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA for telecommunications equipment	EU (Germany), China, U.S.	Canada, EU (UK, Germany), Mexico, China, Taiwan	EU (Poland, Germany), Mexico, China, Switzerland, Canada	EU U.S. Hong Kong China Thailand	3.7 1.2 0 5.0 10.0	– 0–2.4 – – –	1 2 1 2 8
850433	ex	Transformers having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA for telecommunications equipment	U.S., EU (Germany), China, Mexico, Japan	Canada, EU (Germany, UK), China, Mexico, Philippines	Mexico, Canada, EU (Germany, UK), China, Japan	U.S. EU Canada Algeria China	0.8 3.7 0 5.0 5.0	0–1.6 – – – –	2 1 1 1 1
850440		Static converters	China, EU (Germany), U.S., Japan	EU (Germany, UK), Canada, Mexico, China, Hong Kong	China, EU (Germany, UK), Mexico, Japan, Philippines	EU U.S. Hong Kong China Japan	2.8 0.4 0 5.2 0	0–3.3 0–1.5 – 0–10.0 –	6 7 8 11 3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
850450		Other Inductors	China, EU (Germany), Japan, U.S.	Mexico, Canada, EU (Ireland, Germany), Hong Kong, Malaysia	China, Mexico, EU (Germany, Hungary), Japan, Canada	EU China Hong Kong U.S. Japan	1.9 0 0 1.0 0	0–3.7 – – 0–3.0 –	2 1 1 3 1
850490		Parts of power supplies for automatic data processing machines or units thereof of heading 8471; of power supplies for goods of subheading 8443.31 or 8443.32; of power supplies for monitors of subheading 8528.41 or 8528.51 or projectors of subheading 8528.61.	China	Mexico, Canada, EU (Germany, Netherlands), China, Hong Kong	EU (Germany, Finland), China, Mexico, Canada, Philippines	EU Hong Kong China U.S. Mexico	1.3 0 7.3 1.0 0	0–2.2 – 5.0–8.0 0–2.4 –	5 4 4 5 9
	ex	Parts for transformers for telecommunications equipment, static converters and inductors	China, EU (Germany), Japan, U.S.	Mexico, Canada, EU (Germany, Netherlands), China, Hong Kong	EU (Germany, Finland), China, Mexico, Canada, Philippines	EU Hong Kong China U.S. Mexico	1.3 0 7.3 1.0 0	0–2.2 – 5.0–8.0 0–2.4 –	5 4 4 5 9
850511		Of metal (Permanent magnets and articles intended to become permanent magnets after magnetization)	China, Japan	Mexico, Canada, EU (Germany, UK), Singapore, Hong Kong	China, EU (Germany, Netherlands), Japan, Philippines, Brazil	EU China U.S. Hong Kong Japan	2.2 7.0 2.1 0 0	– – – – –	1 2 1 2 1
850519		Other than of metal (Permanent magnets and articles intended to become permanent magnets after magnetization)	China	Mexico, Canada, EU (UK, Germany), Thailand, Hong Kong	China, Japan, EU (UK, Germany), Taiwan, Canada	EU Korea Hong Kong China Thailand	2.2 8.0 0 7.0 1.0	– – – – –	2 2 1 1 1
850520		Electromagnetic couplings, clutches and brakes	EU (Germany), China, Japan, U.S.	EU (Germany, Italy), Mexico, Canada, China, Switzerland	EU (Germany, France), Japan, China, Mexico, Canada	EU U.S. China Hong Kong Malaysia	2.2 3.1 8.0 0 0	– – – – –	1 1 1 1 2
850590	ex	Electromagnets and permanent magnets designed for magnetic resonance imaging apparatus	U.S., EU (UK), China	Mexico, EU (Germany, France), Canada, China, Singapore	EU (Germany, UK), China, Japan, Mexico, New Zealand	EU	1.9	1.8–2.2	3
						U.S.	0.4	0–1.3	3
						Japan	0	–	2
						Thailand	1.0	–	3
						China	8.0	–	2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
850610		Manganese dioxide (Primary cells and primary batteries)	China, Japan, U.S., Singapore	Canada, EU (Spain, Belgium), Mexico, Singapore, Panama	China, Indonesia, EU (Belgium, UK), Malaysia, Thailand	EU Hong Kong U.S. Japan Canada	4.7 0 2.7 0 3.5	– – – – 0–7.0	4 4 1 2 2
850650		Lithium (Primary cells and primary batteries)	Japan, China, Indonesia, Malaysia, EU (France)	EU (Ireland, UK), Switzerland, Canada, Mexico, China	Japan, China, Israel, EU (France, UK), Canada	EU Singapore U.S. Hong Kong China	4.7 0 2.7 0 14.0	– – – – –	3 1 1 1 1
850720	ex	Other lead–acid storage batteries, excluding those used in motor vehicles	China, U.S., EU (Germany), Taiwan, Japan	Canada, EU (Sweden, UK), Mexico, Australia, Dominican Republic	China, Mexico, Taiwan, EU (UK, Germany), Philippines	EU U.S. Canada Russia Australia	3.7 2.3 3.5 5.0 5.0	– 0–3.5 0–7.0 – –	2 3 2 5 1
	ex	Lead-acid accumulators for use in goods classified in 85.17	China, U.S., EU (Germany), Taiwan, Japan	Canada, EU (Sweden, UK), Mexico, Australia, Dominican Republic	China, Mexico, Taiwan, EU (UK, Germany), Philippines	EU U.S. Canada Russia Australia	3.7 2.3 3.5 5.0 5.0	– 0–3.5 0–7.0 – –	2 3 2 5 1
850730	ex	Nickel–cadmium storage batteries, excluding those used in motor vehicles	China, Japan, EU (Sweden, France), Malaysia	EU (Netherlands, Germany), Canada, Singapore, Hong Kong, Mexico	China, Japan, EU (Sweden, France), Malaysia, Hong Kong	EU U.S. Hong Kong Mexico Singapore	2.6 1.7 0 0 0	– 0–2.5 – – –	2 3 1 1 1
850740	ex	Nickel-iron electric storage batteries, excluding those used in motor vehicles	Malaysia, U.S., Russia, China	Canada, China, Mexico, EU (Poland, Portugal), Paraguay	China, EU (UK, France), Japan, New Zealand, Hong Kong	Indonesia EU Hong Kong U.S. Canada	10.0 2.7 0 2.3 3.5	– – – 0–3.4 0–7.0	1 1 1 3 2
850780		Other accumulators	China, Japan, U.S., Korea, EU (Germany, France)	EU (Finland, UK), Canada, Russia, Mexico, Chile	China, Japan, Korea, Taiwan, EU (France, Germany)	China EU U.S. Hong Kong Japan	12.0 2.7 2.3 0 0	– – 0–3.4 – –	3 3 3 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
850780— Cont'd	ex	Other storage batteries excluding those used in motor vehicles	China, Japan, U.S., Korea, EU (Germany, France)	EU (Finland, UK), Canada, Russia, Mexico, Chile	China, Japan, Korea, Taiwan, EU (France, Germany)	China EU U.S. Hong Kong Japan	12.0 2.7 2.3 0 0	– – 0–3.4 – –	3 3 3 3 1
	ex	Lithium-ion accumulators for use in goods classified in 85.17	China, Japan, U.S., Korea, EU (France)	EU (Finland, UK), Canada, Russia, Mexico, Chile	China, Japan, Korea, Taiwan, EU (France, Germany)	China EU U.S. Hong Kong Japan	12.0 2.7 2.3 0 0	– – 0–3.4 – –	3 3 3 3 1
850790	ex	Parts, excluding parts used in batteries for use in motor vehicles	China, Japan, U.S., Korea, EU (France)	Mexico, Korea, Canada, EU (UK, Italy), China	EU (France, Germany), China, Mexico, Korea, Taiwan	EU China Korea U.S. Japan	2.7 9.0 8.0 1.7 0	– 8.0–10.0 – 0–3.5 –	2 2 2 4 1
851310	ex	Lamps using a LED light module as primary light source	China, U.S., EU (Germany)	EU (Netherlands, Germany), Canada, Japan, Australia, Mexico	China, EU (UK, France), Hong Kong, Thailand, Taiwan	EU U.S. Japan Hong Kong Canada	5.7 8.0 0 0 3.5	– 3.5–12.5 – – 0–7.0	1 2 1 2 2
851390	ex	Parts for lamps using a LED light module as primary light source	China, U.S., EU (Germany)	EU (Germany, France), Mexico, Australia, Canada, South Africa	China, Mexico, Hong Kong, Canada, EU (UK, Germany)	EU U.S. Hong Kong Singapore Indonesia	5.7 8.0 0 0 5.0	– 3.5–12.5 – – –	1 2 2 2 2
851430	ex	Solder ovens of a kind used for the production of printed circuits or printed circuit assemblies	EU, U.S., China, Japan, Korea	China, Taiwan, Canada, Malaysia, EU (Germany, Hungary)	EU (Germany, Italy), Canada, China, Japan, Switzerland	China Russia EU Malaysia India	0 5.0 2.2 0 3.0	– – – – 0–7.5	1 4 1 1 5
	ex	Five stage convection ovens of a kind used for the production of printed circuits	EU, U.S., China, Japan, Korea	China, Taiwan, Canada, Malaysia, EU (Germany, Hungary)	EU (Germany, Italy), Canada, China, Japan, Switzerland	China Russia EU Malaysia India	0 5.0 2.2 0 3	– – – – 0–7.5	1 4 1 1 5

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
851440	ex	Other equipment for the heat treatment of materials by induction or dielectric loss for the purpose of semiconductor manufacturing	EU, U.S., Japan	EU (Germany, Netherlands), Canada, Taiwan, China, Mexico	Japan, EU (Germany, Netherlands), Norway, Korea, Taiwan	China EU U.S. Korea Russia	10.0 2.2 0 4.0 5.0	– – – 0–8.0 –	2 1 1 2 1
851490	ex	Parts for furnaces and ovens of a kind used for the production of printed circuits or printed circuit assemblies	EU, U.S., Japan, China	China, EU (Germany, Netherlands), Malaysia, Canada, Korea	EU (Germany, Austria), Japan, Canada, China, Mexico	EU U.S. China Korea Japan	2.2 2.0 4.0 4.0 0	– 0–4.0 0–8.0 0–8.0 –	1 2 2 2 1
851519	ex	Other waver soldering machines for the manufacture of printed circuits and printed circuit assemblies	EU (Germany), U.S., China, Taiwan, Japan	China, EU (Germany, Netherlands), India, Mexico, Philippines	EU (Germany, UK), Canada, Mexico, China, Japan	EU China U.S. Russia Thailand	2.7 10.0 0 7.5 0	– – – 5.0–10.0 –	1 1 1 2 2
851590	ex	Parts for covered articles in 8515.	EU (Germany), U.S., China, Taiwan, Japan	Canada, Mexico, EU (Italy, UK), China, Korea	EU (Germany, Italy), Japan, Canada, China, Switzerland	EU U.S. Russia Hong Kong China	2.7 0.8 10.0 0 6.0	– 0–1.6 – – –	1 2 1 1 1
851650	ex	Microwave ovens which have apparatus for communication in wired or wireless network	China, Thailand, Malaysia	Canada, EU (France, Germany), Mexico, Trinidad and Tobago, Venezuela	China, Malaysia, Thailand, Korea, EU (Sweden, UK)	EU U.S. Japan Russia Canada	5.0 2.0 0 20.0 0	– – – – –	1 1 2 1 1
851660	ex	Electric ovens, other than microwave ovens which have apparatus for communication in wired or wireless network; cookers, cooking plates, boiling rings, grillers and roasters which have apparatus for communication in wired or wireless network	China, EU, Turkey, U.S., Thailand	Canada, EU (Germany, UK), Saudi Arabia, Venezuela, Costa Rica	China, Canada, Mexico, EU (Germany, Italy), Thailand	EU U.S. Russia Canada Australia	2.7 1.4 15.0 5.3 5.0	– 0–2.7 – 0–8.0 –	5 2 7 3 1
851679	ex	Electro-thermic appliances of a kind used for domestic purposes which have apparatus for communication in wired or wireless network (other than those of subheadings 8516.10 to 8516.72)	China, EU	Canada, EU (UK, Germany), China, Saudi Arabia, Guatemala	China, Mexico, EU (Germany, Ireland), Japan, Taiwan	EU U.S. Japan Russia Australia	2.7 2.7 0 15.0 5.0	– – – – –	2 1 2 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
851761		Base stations	China, EU (Sweden, Netherlands)	EU (Germany, UK), Brazil, Canada, Mexico, Singapore	EU (Estonia, Sweden), China, Mexico, Korea, Canada	EU U.S. Japan Korea Hong Kong	0 0 0 0 0	– – – – –	1 1 1 2 1
851762		Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus.	China, U.S., Hong Kong, EU	EU (Netherlands, UK), Mexico, Canada, Japan, Brazil	China, Mexico, Malaysia, Thailand, EU (Germany, Estonia)	EU U.S. Hong Kong Japan Mexico	0 0 0 0 0	– – – – –	1 1 7 1 17
851769		Other (Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network)).	U.S., Israel, EU, Taiwan, Thailand	EU (UK, Netherlands), Australia, Pakistan, Mexico, Canada	China, Mexico, Korea, EU (UK, Germany), Taiwan	EU U.S. India Singapore Japan	1.9 0 0 0 0	0–9.3 – – – –	5 1 8 3 1
	ex	Other voices, images or data reception apparatus for radiotelephony or radiotelegraphy	U.S., Israel, EU, Taiwan, Thailand	EU (UK, Netherlands), Australia, Pakistan, Mexico, Canada	China, Mexico, Korea, EU (UK, Germany), Taiwan	EU U.S. India Singapore Japan	1.9 0 0 0 0	0–9.3 – – – –	5 1 8 3 1
851770		Parts (Telephone sets, including telephones for cellular networks or for other wireless networks; Parts of other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network), other than transmission or reception apparatus of headings 84.43, 85.25, 85.27 or 85.28)	China, Hong Kong, Korea, EU	Mexico, EU (UK, Netherlands), Japan, Canada, China	China, Mexico, EU (Germany, Sweden), Malaysia, Korea	Hong Kong EU China U.S. Mexico	0 2.2 1.4 0 0	– 0–5.0 0–8.0 – –	7 4 7 1 14
851810		Microphones and stands therefore	China, Hong Kong, EU (Germany)	EU (Germany, UK), Canada, Hong Kong, Australia, China	China, Japan, Mexico, EU (Germany, Denmark), Taiwan	EU U.S. China Hong Kong Korea	1.3 1.6 6.7 0 4.0	0–2.5 0–4.9 0–10.0 – 0–8.0	2 3 3 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
851810— Cont'd	ex	Microphones condenser, with a diameter of not exceeding 15 mm and wireless microphones, including transmission apparatus	China, Hong Kong, EU (Germany)	EU (Germany, UK), Canada, Hong Kong, Australia, China	China, Japan, Mexico, EU (Germany, Denmark), Taiwan	EU U.S. China Hong Kong Korea	1.3 1.6 6.7 0 4.0	0–2.5 0–4.9 0–10.0 – 0–8.0	2 3 3 1 2
	ex	Microphones and stands therefore	China, Hong Kong, EU (Germany)	EU (Germany, UK), Canada, Hong Kong, Australia, China	China, Japan, Mexico, EU (Germany, Denmark), Taiwan	EU U.S. China Hong Kong Korea	1.3 1.6 6.7 0 4.0	0–2.5 0–4.9 0–10.0 – 0–8.0	2 3 3 1 2
851821		Single loudspeakers, mounted in their enclosures	China, U.S., Hong Kong, EU (Germany, Belgium)	EU (Denmark, Germany), Canada, Japan, India, Mexico	China, Mexico, EU (Italy, UK), Taiwan, Indonesia	EU U.S. Hong Kong Canada Mexico	4.5 2.5 0 6.5 15.0	– 0–4.9 – – –	1 2 1 1 2
851822		Multiple loudspeakers, mounted in the same enclosure	China, Hong Kong, EU (Netherlands), Mexico, U.S.	EU (Germany, Netherlands), Canada, Mexico, Singapore, Venezuela	China, Mexico, EU (UK, France), Malaysia, Canada	EU U.S. Hong Kong Japan Mexico	4.5 2.5 0 0 15.0	– 0–4.9 – – –	1 2 1 1 2
851829		Other (Loudspeakers, whether or not mounted in their enclosures)	China, Hong Kong, U.S., Mexico	Canada, Mexico, China, Japan, EU (Germany, UK)	China, Mexico, Vietnam, EU (Italy, Germany), Taiwan	EU U.S. Hong Kong Japan Korea	1.5 1.6 0 0 4.0	0–3.0 0–4.9 – – 0–8.0	2 3 1 1 2
	ex	Loudspeakers, whether or not mounted in their enclosures, other	China, Hong Kong, U.S., Mexico	Canada, Mexico, China, Japan, EU (Germany, UK)	China, Mexico, Vietnam, EU (Italy, Germany), Taiwan	EU U.S. Hong Kong Japan Korea	1.5 1.6 0 0 4.0	0–3.0 0–4.9 – – 0–8.0	2 3 1 1 2
851830		Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	China, Hong Kong, U.S., Mexico	EU (UK, Sweden), Canada, Hong Kong, Mexico, Australia	China, Thailand, Mexico, EU (Germany, Ireland), Malaysia	EU U.S. Hong Kong Japan Canada	1.0 1.6 0 0 1.5	0–2.0 0–4.9 – – 0–4.5	2 3 2 1 3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
851830— Cont'd	ex	Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	China, Hong Kong, U.S., Mexico	EU (UK, Sweden), Canada, Hong Kong, Mexico, Australia	China, Thailand, Mexico, EU (Germany, Ireland), Malaysia	EU U.S. Hong Kong Japan Canada	1.0 1.6 0 0 1.5	0–2.0 0–4.9 – – 0–4.5	2 3 2 1 3
	ex	Wireless handsets for telephonic apparatus	China, U.S., Hong Kong, Mexico	EU (Finland, UK), Korea, Mexico, Canada, Singapore	China, Vietnam, EU (Ireland, UK), Korea, Mexico	EU U.S. Hong Kong Japan Canada	1.0 1.6 0 0 1.5	0–2.0 0–4.9 – – 0–4.5	2 3 2 1 3
	ex	Other wireless combined microphone / speaker sets	China, Hong Kong, U.S., EU, Mexico	EU (UK, Sweden), Canada, Hong Kong, Australia, Mexico	China, Thailand, Mexico, Malaysia, EU (Germany, Ireland)	EU U.S. Hong Kong Japan Canada	1.0 1.6 0 0 1.5	0–2.0 0–4.9 – – 0–4.5	2 3 2 1 3
851840		Audio-frequency electric amplifiers	China, U.S., EU, Mexico, Hong Kong	Canada, EU (Germany, UK), Mexico, United Arab Emirates, Japan	China, Mexico, Thailand, EU (Germany, Sweden), Canada	EU U.S. Mexico Japan Hong Kong	3.8 1.6 8.6 0 0	3.0–4.5 0–4.9 0–15.0 – –	2 3 7 1 1
851850		Electric sound amplifier sets	China, EU (France), U.S.	EU (Germany, UK), Canada, Hong Kong, Japan, Australia	China, Canada, EU (Germany, Italy), Taiwan, Japan	EU U.S. Japan Hong Kong Korea	2.0 2.5 0 0 8.0	– 0–4.9 – – –	1 2 1 1 1
851890		Parts (Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets.)	China, Hong Kong, U.S., Korea, Singapore	Mexico, Japan, Canada, EU (UK, Germany), Hong Kong	China, EU (Germany, UK), Taiwan, Mexico, Vietnam	Hong Kong EU China Mexico U.S.	0 2.0 5.3 0 3.4	– – 0–10.5 – 0–8.5	1 1 2 4 4
851920		Apparatus operated by coins, banknotes, bank cards, tokens or by other means of payment	EU (UK, Italy, Netherlands), U.S., Mexico	EU (UK, Netherlands), Canada, Mexico, China, Japan	Mexico, Taiwan, EU (Germany, UK), Australia, China	EU U.S. Canada New Zealand Switzerland	6.7 0 2.5 3.3 (?)	4.5–9.5 – 0–5.0 0–5.0 (?)	3 1 2 3 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
851930		Turntables (record-decks)	Hong Kong, China, EU (Germany, UK, Netherlands)	EU (Germany, France), Mexico, Brazil, Canada, China	China, Taiwan, EU (Germany, UK), Malaysia, Hong Kong	EU U.S. Hong Kong Japan Australia	2.0 2.0 0 0 0	– 0–3.9 – – –	1 2 1 1 1
851981		Using magnetic, optical or semiconductor media (Sound recording or reproducing apparatus- Other apparatus)	China, Hong Kong, EU (UK, Netherlands)	Mexico, EU (UK, Germany), Canada, Japan, United Arab Emirates	China, Japan, Thailand, Malaysia, EU (Austria, UK)	EU U.S. Hong Kong Japan Mexico	3.9 1.5 0 0 6.7	0–9.5 0–3.9 – – 0–15.0	15 5 7 1 12
851989		Other (Sound recording or reproducing apparatus)	Israel, EU (Netherlands, UK), China, U.S.	EU (Netherlands, France), Uruguay, Japan, Argentina, Venezuela	China, Israel, EU (UK, Germany), Indonesia, Taiwan	EU India U.S. Japan Malaysia	3.4 9.0 1.3 0 2.1	2.0–5.0 5.0–10.0 0–3.9 – 0–10.0	4 5 3 1 7
852110		Magnetic tape-type	Japan, EU (Netherlands), U.S.	EU (UK, Germany), Canada, Mexico, Colombia, India	Japan, China, Korea, Taiwan, EU (UK, Poland)	EU U.S. China India Singapore	11.0 0 30.0 10.0 0	8.0–14.0 – – – –	2 3 6 9 1
852190		Other (Video recording or reproducing apparatus, whether or not incorporating a video tuner)	China, Hong Kong	EU (UK, Germany), Canada, Mexico, Hong Kong, Brazil	China, Malaysia, Korea, Mexico, Taiwan	EU U.S. Japan Hong Kong Canada	13.9 0 0 0 3.0	– – – – 0–6.0	1 1 1 4 2
852210		Pick-up cartridges	Thailand, Singapore, EU (Denmark), Japan	EU (UK, Belgium), Singapore, Hong Kong, Canada, Australia	Japan, EU (Denmark, UK), Mexico, China, Switzerland	Singapore Malaysia EU Indonesia Japan	0 0 4.0 2.5 0	– – – 0–5.0 –	1 1 1 2 1
852290		Other (Parts and accessories suitable for use solely or principally with the apparatus of headings 85.19 to 85.21)	China, Hong Kong, Singapore, Indonesia, Malaysia	Canada, Singapore, Mexico, EU (Germany, Netherlands), Brazil	China, Mexico, Japan, Korea, EU (France, Germany)	Hong Kong EU China Japan Singapore	0 1.6 26.5 0 0	– 0–4.0 20.0–30.0 – –	9 5 13 1 8

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852290— Cont'd	ex	Other, including multi-component Integrated circuits incorporated as a part of electronic surveillance equipment, but excluding cabinets and cases of wood	China, Hong Kong, Singapore, Indonesia, Malaysia	Canada, Singapore, Mexico, EU (Germany, Netherlands), Brazil	China, Mexico, Japan, Korea, EU (France, Germany)	Hong Kong EU China Japan Singapore	0 1.6 26.5 0 0	– 0–4.0 20.0–30.0 – –	9 5 13 1 8
852321		Cards incorporating a magnetic stripe	U.S., EU (UK, Germany, France), Malaysia, Singapore	Canada, EU (UK, Poland), Mexico, Japan, Taiwan	EU (UK, France), Canada, China, Taiwan, Japan	EU Singapore Canada Hong Kong Malaysia	3.5 0 7.3 0 0	– – 6.0–8.5 – –	1 2 2 2 2
	ex	Cards incorporating a magnetic stripe, use for recording data or programs in code form for automatic data processing machines, whether or not recorded.	U.S., EU (UK, Germany, France), Malaysia, Singapore	Canada, EU (UK, Poland), Mexico, Japan, Taiwan	EU (UK, France), Canada, China, Taiwan, Japan	EU Singapore Canada Hong Kong Malaysia	3.5 0 7.3 0 0	– – 6.0–8.5 – –	1 2 2 2 2
852329		Other (Magnetic media)	Singapore, Japan, Malaysia	EU (Netherlands, Germany), Canada, Mexico, Japan, Israel	Japan, Mexico, EU (France, UK), China, Taiwan	China Thailand EU U.S. Singapore	1.3 7.5 1.4 0 0	0–10.0 0–30.0 0–3.5 – –	8 37 5 9 18
852340		Optical media	EU (Germany, Netherlands, Austria), U.S., Singapore, Taiwan	Canada, Mexico, EU (Germany, Netherlands), Japan, China	Taiwan, Mexico, EU (Germany, UK), Japan, Canada	EU China Canada U.S. Japan	1.5 2.5 3.0 0.5 0	0–3.5 0–10.0 0–6.0 0–2.7 –	12 4 2 5 1
852351		Solid-state non-volatile storage devices	China, Taiwan, Hong Kong, Korea	Canada, EU (UK, Germany), Mexico, Paraguay, Thailand	China, Taiwan, Korea, Malaysia, Japan	Hong Kong EU China U.S. Korea	0 0.9 0 0 2.7	– 0–3.5 – – 0–8.0	2 4 2 1 6
852352		Smart cards	China, EU (France, Germany), U.S., Singapore, Hong Kong, Switzerland	Mexico, Canada, Brazil, EU (Germany, UK), Hong Kong	China, EU (Germany, UK), Japan, Malaysia, Taiwan	EU U.S. Hong Kong China India	1.9 0 0 0 0	0–3.7 – – – –	2 1 1 2 3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852359		Other (Semiconductor media)	Malaysia, Singapore, U.S., EU (Germany, France)	Canada, Singapore, Mexico, United Arab Emirates, EU (Germany, UK)	Japan, EU (Sweden, France), China, Taiwan, Switzerland	Singapore EU U.S. Korea Australia	0 0.9 0 2.3 0	– 0–3.5 – 0–8.0 –	5 4 1 7 1
852380		Other (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	Singapore, India, Thailand, EU (Ireland, UK, France), U.S.	EU (Finland, Germany), Canada, Singapore, Malaysia, Mexico	Taiwan, EU (Germany, Czech Republic), Indonesia, China, Canada	India EU Singapore U.S. Thailand	8.6 0.9 0 0.9 5.3	0–10.0 0–3.5 – 0–1.8 0–30.0	7 4 5 2 8
	ex	Other, other than acetate discs for record players (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	Singapore, India, Thailand, EU (Ireland, UK, France), U.S.	EU (Finland, Hungary), Canada, Singapore, Malaysia, Mexico	Taiwan, Indonesia, EU (Germany, Italy), China, Canada	India EU Singapore U.S. Thailand	8.6 0.9 0 0.9 5.3	0–10.0 0–3.5 – 0–1.8 0–30.0	7 4 5 2 8
852550		Transmission apparatus	U.S., Malaysia, EU, Singapore, Canada	Brazil, Canada, EU (UK, Germany), Mexico, China	China, Mexico, Taiwan, Canada, EU (UK, France)	U.S. EU Canada Mexico Singapore	1.2 3.6 0 0 0	0–3.0 – – – –	4 1 1 5 1
852560		Transmission apparatus incorporating reception apparatus	U.S., Canada, EU, Hong Kong	EU (UK, Germany), Canada, Mexico, Israel, Japan	Canada, China, Malaysia, Mexico, EU (UK, France)	U.S. EU Canada Australia Turkey	0 0 0 0 0	– – – – –	2 1 1 1 1
852580		Television cameras, digital cameras and video camera recorders	China, Japan, EU (Netherlands, Germany), Hong Kong	EU (UK, Germany), Paraguay, Hong Kong, Canada, Mexico	China, Japan, Thailand, Taiwan, EU (Germany, Sweden)	EU U.S. China Hong Kong Japan	5.4 1.7 8.0 0 0	0–14.0 0–2.1 0–35.0 – –	5 5 13 4 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852610		Radar apparatus	EU, U.S., Russia, Japan, Canada	EU (Finland, Romania), Canada, Taiwan, Australia, Korea	EU (UK, Germany), Mexico, Canada, Japan, China	EU U.S. China Canada Singapore	3.7 0 4.0 0 0	– – 2.0–5.0 – –	1 1 3 1 2
852691		Radio navigational aid apparatus	China, Japan, EU (Germany, Netherlands), Taiwan, U.S.	Canada, EU (Netherlands, France), Mexico, Australia, Brazil	Taiwan, China, Japan, Mexico, EU (Germany, Portugal)	EU U.S. Japan Canada China	3.7 0 0 0 2.0	– – – – –	2 1 2 1 2
852692		Radio remote control apparatus	EU (Germany, France), U.S., Mexico, Hong Kong, China	Canada, Mexico, EU (UK, Germany), China, Japan	Mexico, China, EU (Germany, Italy), Japan, Taiwan	EU U.S. China Canada Hong Kong	3.7 2.5 5.0 0 0	– 0–4.9 – – –	1 2 1 1 1
852712		Pocket-size radio cassette-players	China, Hong Kong, EU (UK)	Honduras, Paraguay, Brazil, Canada, EU (Greece, Spain)	China, EU (UK, Italy), Malaysia, Singapore, Hong Kong	EU Chile India Hong Kong Canada	12.0 6.0 10.0 0 3.0	10.0–14.0 – – – 0–6.0	2 1 1 1 2
852713		Other apparatus combined with sound recording or reproducing apparatus	China, Malaysia, Hong Kong, EU (Netherlands)	China, Saudi Arabia, Paraguay, Venezuela, United Arab Emirates	China, Malaysia, EU (Denmark, UK), Hong Kong, Thailand	EU U.S. Japan Hong Kong Russia	12.0 0 0 0 20.0	10.0–4.0 – – – –	3 4 1 1 3
852719		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	China, Mexico, Hong Kong	EU (Netherlands, Germany), Canada, Turkey, Mexico, Venezuela	China, Vietnam, Japan, Hong Kong, EU (Sweden, UK)	EU Hong Kong U.S. Japan Indonesia	0 0 1.5 0 10.0	– – 0–3.0 – –	1 1 2 1 4
852721		Other radio-broadcast receivers capable of operating without an external source of power	China, EU (Portugal), Mexico, Thailand, U.S.	Canada, Mexico, EU (Germany, Belgium), Australia, Japan	China, Mexico, Thailand, Japan, Indonesia	U.S. EU Canada Japan Hong Kong	1.0 12.7 0 0 0	0–2.0 10.0–14.0 – – –	2 6 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852729		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	Thailand, U.S., Malaysia	Canada, Mexico, EU (UK, Germany) Japan, Hong Kong	Mexico, China, Malaysia, Taiwan, EU (Germany, Slovak Republic)	EU Canada U.S. India Thailand	12.0 0 4.4 10.0 10.0	– – – – –	1 1 2 1 1
852791		Combined with sound recording or reproducing apparatus	China, Malaysia, Hong Kong	Canada, Japan, Australia, China, Argentina	China, Malaysia, Mexico, Indonesia, EU (Czech Republic, UK)	U.S. EU Japan Canada Hong Kong	2.1 12.0 0 3.0 0	0–4.9 10.0–14.0 – 0–6.0 –	4 5 1 2 1
852792		Not combined with sound recording or reproducing apparatus but combined with a clock	China, Israel, Hong Kong, EU (Netherlands)	Canada, EU (Belgium, Italy), Mexico, Paraguay, Brazil	China, Malaysia, Japan, Vietnam, Korea	EU U.S. Hong Kong Canada Australia	4.5 1.5 0 3.0 0	0–9.0 0–3.0 – 0–6.0 –	2 2 1 2 1
852799		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	Malaysia, China, U.S., EU (Belgium), Taiwan	EU (UK, Germany), Canada, China, Australia, Japan	China, Malaysia, Mexico, EU (Germany, UK), Japan	EU U.S. Canada Australia Hong Kong	9.0 2.3 3.0 5.0 0	– 0–6.0 0–6.0 – –	1 4 2 1 1
852849		Other (Cathode-ray tube monitors)	Thailand, Malaysia, EU (Germany)	EU (Netherlands, Italy), Venezuela, Mexico, Canada, Paraguay	China, EU (Italy, Germany), Korea, Japan, Thailand	EU U.S. Algeria Thailand Japan	14.0 3.3 21.7 20.0 0	– 0–5.0 5.0–30.0 – –	2 15 3 2 1
852859		Other (Other monitors)	China, U.S., Japan, EU (Romania, Germany), Mexico	Mexico, EU (Germany, UK), Canada, Brazil, China	China, Mexico, Japan, Korea, Taiwan	U.S. EU Japan Mexico Thailand	2.1 14.0 0 14.0 20.0	0–5.0 – – 10.0–15.0 –	11 3 1 5 2
	ex	Monitors, not incorporating television reception apparatus with a diagonal size of 24 inches or less (excl with cathode ray tube and those of a kind solely or principally used in an automatic data-processing machine of heading 8471)	China, U.S., Japan, EU (Romania, Germany), Mexico	Mexico, EU (Germany, UK), Canada, Brazil, China	China, Mexico, Japan, Korea, Taiwan	U.S. EU Japan Mexico Thailand	2.1 14.0 0 14.0 20.0	0–5.0 – – 10.0–15.0 –	11 3 1 5 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852869		Other (Projectors)	China, EU (Netherlands, Belgium), Canada, U.S., Japan	EU (UK, France), Canada, Brazil, Paraguay, Singapore	China, Japan, EU (Belgium, UK), Canada, Philippines	EU U.S. Hong Kong Canada Japan	5.3 3.1 0 3.1 0	0–14.0 0–5.0 – 0–6.0 –	3 13 2 4 1
852871		Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, not designed to incorporate a video display or screen	China, U.S., Mexico	Mexico, Hong Kong, Chile, Canada, Argentina	Mexico, China, Taiwan, Indonesia, Thailand	U.S. EU Mexico Canada Japan	2.8 7.0 11.0 1.3 0	0–5.0 0–14.0 0–15.0 0–5.0 –	5 4 5 4 1
852872		Other, colour (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	Mexico, China, Malaysia	Mexico, Canada, Venezuela, Hong Kong, Panama	Mexico, China, Thailand, Malaysia, Japan	EU U.S. Japan Canada Australia	14.0 2.8 0 3.7 5.0	– 0–5.0 – 0–5.5 –	6 22 3 15 1
	ex	Reception apparatus for television, colour, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	Mexico, China, Malaysia	Mexico, Canada, Venezuela, Hong Kong, Panama	Mexico, China, Thailand, Malaysia, Japan	EU U.S. Japan Canada Australia	14.0 2.8 0 3.7 5.0	– 0–5.0 – 0–5.5 –	6 22 3 15 1
852873		Other, black and white or other monochrome (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	U.S., Switzerland, EU (UK)	Mexico, Brazil, EU (Italy, UK), Ecuador, Jordan	China, Korea, Japan, Mexico ¹¹	India EU Singapore Namibia Malaysia	10.0 2.0 0 16.7 8.3	– – – 0–25.0 0–25.0	2 1 2 3 3

¹¹ The listed countries are the only countries for which U.S. import data were available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
852873— Cont'd	ex	Reception apparatus for television, black and white or other monochrome, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	U.S., Switzerland, EU (UK)	Mexico, Brazil, EU (Italy, UK), Ecuador, Jordan	China, Korea, Japan, Mexico ¹²	India EU Singapore Namibia Malaysia	10.0 2.0 0 16.7 8.3	— — — 0–25.0 0–25.0	2 1 2 3 3
852910		Aerials and aerial reflectors of all kinds; parts suitable for use therewith	China, U.S., EU (Germany), Hong Kong, Taiwan	EU (Germany, UK), Canada, Mexico, Korea, Japan	China, EU (UK, Sweden), Taiwan, Mexico, Canada	EU U.S. Japan Hong Kong Canada	3.9 1.2 0 0 0	3.6–5.0 0–3.0 — — —	7 4 1 2 1
	ex	Other aerials and aerial reflectors of a kind used with transmission apparatus for radio-broadcasting or television	China, Canada, Mexico, U.S.	EU (UK, Germany), Canada, Mexico, Japan, Chile	China, Taiwan, EU (UK, Germany), Canada, Mexico	EU U.S. Japan Hong Kong Canada	3.9 1.2 0 0 0	3.6–5.0 0–3.0 — — —	7 4 1 2 1
852990		Other (Parts suitable for use solely or principally with the apparatus of headings 85.25 to 85.28.)	Hong Kong, China, Korea	Mexico, EU (UK, Germany), Japan, Canada, Taiwan	China, Mexico, Japan, EU (UK, Germany), Canada	EU Hong Kong Mexico China Japan	2.7 0 0.6 8.2 0	0–5.0 — 0–5.0 0–15.0 —	6 11 24 11 6
	ex	Other, including multi-component integrated circuits incorporated as a part of set-top box, but excluding cabinets and cases of wood	Hong Kong, China, Korea	Mexico, EU (UK, Germany), Japan, Canada, Taiwan	China, Mexico, Japan, EU (UK, Germany), Canada	EU Hong Kong Mexico China Japan	2.7 0 0.6 8.2 0	0–5.0 — 0–5.0 0–15.0 —	6 11 24 11 6
853010		Equipment for railways or tramways (Electrical signaling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	EU (Germany, France, Spain), U.S., Japan, Canada	Canada, EU (Germany, UK), Brazil, Mexico, Australia	Mexico, EU (Germany, France), Canada, China, Australia	EU Pakistan China Brazil Turkey	1.7 5.0 10.0 14.0 1.7	— — — — —	1 1 1 2 1

¹² The listed countries are the only countries for which U.S. import data were available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
853080		Other equipment (Electrical signaling, safety or traffic control equipment for roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08)	EU (Germany, Austria, Italy), U.S., China, Mexico, Thailand	Canada, EU (UK, Netherlands), Mexico, Saudi Arabia, Venezuela	Mexico, EU (Belgium, Netherlands), China, Taiwan, Canada	EU U.S. Turkey India China	1.7 0 1.7 7.5 8.0	– – – – –	1 1 1 1 1
853090		Parts (Electrical signalling, safety or traffic control equipment which is controlled with automatic data processing machines (other than those heading 86.08)	EU (Italy, Austria, Germany), U.S., Mexico	Canada, Mexico, EU (Netherlands, UK), Australia, Japan	Mexico, China, EU (Italy, UK), Taiwan, Canada	EU U.S. China Canada Mexico	1.7 0 8.0 0 0	– – – – –	1 1 1 1 1
853180		Other apparatus (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30.)	U.S., China, EU (Germany, UK), Hong Kong, Korea	EU (France, Germany), Canada, Mexico, Japan, United Arab Emirates	China, EU (UK, Germany), Mexico, Japan, Taiwan	EU U.S. Hong Kong Korea Canada	1.1 0.7 0 8.0 0	0–2.2 0–1.3 – – –	2 2 2 3 1
	ex	CRT indicator panels and displays	Taiwan, Japan, Tunisia	Mexico, EU (Germany, France), Singapore, Hong Kong, Japan	EU (Germany, UK), Japan, Taiwan, Philippines, Malaysia	EU U.S. Hong Kong Korea Canada	1.1 0.7 0 8.0 0	0–2.2 0–1.3 – – –	2 2 2 3 1
853190		Parts (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30)	Korea, China, Hong Kong, EU (Netherlands, Germany), U.S.	EU (UK, France), Mexico, Canada, Brazil, China	Mexico, China, EU (Italy, UK), Israel, Canada	EU U.S. Hong Kong Singapore Korea	1.1 0.7 0 0 5.3	0–2.2 0–1.3 – – 0–8.0	2 4 1 3 3
	ex	Parts of Electric sound or visual signalling apparatus, other than those of heading 85.12 or 85.30. (excluding for burglar or fire alarms and similar apparatus)	Korea, China, Hong Kong, EU (Netherlands, Germany), U.S.	EU (UK, France), Mexico, Canada, Brazil, China	Mexico, China, EU (Italy, UK), Israel, Canada	EU U.S. Hong Kong Singapore Korea	1.1 0.7 0 0 5.3	0–2.2 0–1.3 – – 0–8.0	2 4 1 3 3
853540		Lightning arresters, voltage limiters and surge suppressors	EU (Germany, France), U.S., China, Japan	Canada, Mexico, Korea, Saudi Arabia, South Africa	China, EU (Germany, Denmark), Mexico, Taiwan, India	EU U.S. Korea Canada Brazil	2.7 2.7 8.0 0 16.0	– – – – –	1 1 1 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
853590		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes), for a voltage exceeding 1,000 volts.)	China, U.S., India, Brazil, Korea	EU (Germany, Belgium), Mexico, Canada, Korea, Singapore	Mexico, EU (Germany, France), China, Canada, Japan	EU U.S. Singapore Malaysia China	2.7 2.7 0 15.0 10.0	– – – – –	1 2 2 4 1
853610		Fuses	EU (France, Germany, Italy), China, U.S.	Mexico, Canada, EU (France, Netherlands), Hong Kong, China	Mexico, EU (Germany, France), Japan, China, Taiwan	EU China U.S. Hong Kong Korea	2.3 10.0 2.7 0 8.0	– – – – –	3 1 1 1 2
853620		Automatic circuit breakers	EU (Germany, France), U.S., China, Japan	Dominican Republic, Mexico, Canada, EU (Poland, Netherlands), China	Mexico, Dominican Republic, EU (Italy, France), China, Switzerland	EU U.S. China Mexico Japan	2.3 2.7 9.0 1.7 0	– – – 0–5.0 –	2 1 1 3 1
853630		Other apparatus for protecting electrical circuits	China, Mexico, EU (Germany), U.S., Korea	EU (Germany, UK), Canada, Mexico, China, Colombia	China, Mexico, EU (Germany, Greece), Costa Rica, Honduras	EU U.S. China Mexico Canada	2.3 2.7 9.0 0 0	– – – – –	3 2 1 6 3
	ex	Power strips and surge protectors	China, Japan, EU (Germany, France), U.S.	EU (Germany, UK), Canada, Mexico, China, Colombia	China, Mexico, EU (Germany, Greece), Costa Rica, Honduras	EU U.S. China Mexico Canada	2.3 2.7 9.0 0 0	– – – – –	3 2 1 6 3
853641		For a voltage not exceeding 60 V (Relays)	EU (Germany), Japan, U.S., China, Korea	Mexico, EU (UK, France), Canada, Hong Kong, China	Japan, China, Mexico, EU (Germany, Portugal), India	EU U.S. China Mexico Hong Kong	2.3 2.7 10.0 0.4 0	– – – 0–5.0 –	2 1 1 12 1
	ex	Electrical relays for a voltage not exceeding 60v designed for industrial automation applications	EU (Germany, France, Netherlands), U.S., China	Mexico, EU (UK, France), Canada, Hong Kong, China	Japan, China, Mexico, EU (Germany, Portugal), India	EU U.S. China Mexico Hong Kong	2.3 2.7 10.0 0.4 0	– – – 0–5.0 –	2 1 1 12 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
853649		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	China, India, U.S., Brazil, Japan	Canada, Mexico, EU (Spain, Germany), China, Brazil	EU (Germany, France), China, Mexico, Switzerland, Japan	EU U.S. China Mexico India	2.3 2.7 10.0 0 7.5	– – – – –	1 1 1 6 1
	ex	Other relays designed for industrial automation applications	EU (Germany), Japan, U.S., China, Korea	Canada, Mexico, EU (Spain, Germany), China, Brazil	EU (Germany, France), China, Mexico, Switzerland, Japan	EU U.S. China Mexico India	2.3 2.7 10.0 0 7.5	– – – – –	1 1 1 6 1
853650		Other switches	EU (Germany), Japan, U.S., China, Korea	Canada, Mexico, EU (UK, Germany), China, Hong Kong	Mexico, EU (Germany, France), Japan, China, Taiwan	EU U.S. China Mexico Hong Kong	1.3 1.8 0 0.3 0	0–2.3 0–2.7 – 0–5.0 –	7 3 1 18 1
853661		lamp-holder	China, EU (Germany, Italy), U.S., Mexico	Mexico, Canada, EU (Germany, Netherlands), China, Korea	China, Mexico, EU (Germany, Italy), Japan, India	EU U.S. Mexico China Hong Kong	2.3 2.7 0 10.0 0	– – – – –	2 1 4 1 1
853669		Other (lamp-holders, plugs, and sockets)	China, EU (Germany, Italy), U.S., Mexico	Mexico, EU (Germany, UK), Canada, Hong Kong, China	Mexico, China, EU (Germany, France), Japan, Taiwan	EU U.S. China Korea Hong Kong	0.8 1.4 0 4.0 0	0–2.3 0–2.7 – 0–8.0 –	3 2 1 2 1
853670		Connectors for optical fibres, optical fibre bundles or cables	China, U.S., Singapore, Mexico, Switzerland	Mexico, EU (UK, Germany), Korea, Norway, Japan	Mexico, China, Japan, Taiwan, EU (France, UK)	EU U.S. Japan China Hong Kong	3.0 0 0 8.0 0	– – – – –	1 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
853690		Other apparatus (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	China, U.S., India, Brazil, Korea	Mexico, EU (Germany, Belgium), Canada, China, Japan	Mexico, EU (Germany, France), China, Japan, Canada	EU China Hong Kong Mexico U.S.	1.2 0 0 0.2 1.4	0–2.3 – – 0–5.0 0–2.7	4 1 2 29 2
	ex	Wafer probing plates, probe cards, prober docking hardware, prober docking manipulator, or other items designed for testing semiconductor wafers	U.S., Japan, EU (Germany, Netherlands)	Mexico, Canada, EU (Germany, UK), Taiwan, United Arab Emirates	Mexico, China, EU (Germany, UK), Japan, Taiwan	EU China Hong Kong Mexico U.S.	1.2 0 0 0.2 1.4	0–2.3 – – 0–5.0 0–2.7	4 1 2 29 2
853710		For a voltage not exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	EU (Germany), Japan, U.S., China, Brazil	Canada, EU (Germany, UK), Mexico, China, Brazil	Mexico, EU (Germany, UK), China, Canada, Japan	EU U.S. China Korea Canada	2.1 2.7 6.0 8.0 0.7	– – 5.0–8.4 – 0–2.0	3 3 7 3 9
853720		For a voltage exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	EU (Germany, France, Italy), China, U.S.	Canada, Mexico, Singapore, China, EU (UK, Luxembourg)	Mexico, EU (Germany, Spain), Canada, Japan, Israel	EU China Russia U.S. Thailand	2.1 8.4 5.0 2.7 5.5	– – – – 1.0–10.0	2 2 2 1 6

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
853810		Boards, panels, consoles, desks, cabinets and other bases for the goods of heading 85.37, not equipped with their apparatus	EU (Germany, France, Italy), China, U.S.	Canada, Mexico, EU (Germany, UK), Korea, China	EU (Germany, France), Mexico, Canada, China, Japan	EU Russia U.S. China India	2.2 5.0 3.7 7.7 7.5	– – – 7.0–8.4 –	1 1 1 2 2
853890		Other (Parts suitable for use solely or principally with the apparatus of heading 85.35, 85.36 or 85.37.)	China, India, U.S., Brazil, Japan	Mexico, EU (Germany, UK), China, Canada, Hong Kong	EU (Germany, France), Mexico, China, Japan, Canada	EU China U.S. Mexico Korea	1.2 7.0 2.8 0 8.0	0–3.2 – 0–3.5 – –	4 1 5 6 5
	ex	Parts for items in 8536 and 8537, specifically printed circuit assemblies, molded parts, other parts of switchgear, switchboards, panel boards and distribution boards and adaptors of heading 8537	China, India, U.S., Brazil, Japan	Mexico, EU (Germany, Sweden), Canada, China, Hong Kong	Mexico, China, EU (Germany, Italy), Japan, Canada	EU China U.S. Mexico Korea	1.2 7.0 2.8 0 8.0	0–3.2 – 0–3.5 – –	4 1 5 6 5
853939	ex	Cool cathode lamp for the manufacture of flat panel displays	Korea, China, Taiwan	EU (Netherlands, Germany), Canada, Mexico, Korea, China	China, EU (Germany, UK), Japan, Korea, Canada	China EU Korea U.S. Mexico	8.0 2.7 8.0 2.4 3.6	– – – – 0–10.0	4 1 2 1 7
853949		Other (Ultra-violet or infra-red lamps; arc-lamps)	EU (Germany), Japan, U.S., China	Canada, EU (Germany, UK), Japan, Korea, China	EU (Germany, Hungary), China, Mexico, Japan, Singapore	EU U.S. Korea China Japan	2.7 2.4 6.3 8.0 0	– – 3.0–8.0 – –	1 1 3 1 1
854011		Colour (Cathode-ray television picture tubes, including video monitor cathode-ray tubes)	Malaysia, China, Korea, Indonesia	Saudi Arabia, Venezuela, Cayman Islands, EU (Netherlands, UK), Mexico	Canada, Japan, Taiwan, China, Hong Kong	India Brazil China Egypt Indonesia	10.0 18.0 12.0 2.0 5.0	– – – – –	3 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854012		Black and white or other monochrome (cathode-ray television picture tubes, including video monitor cathode-ray tubes)	Hong Kong, U.S., EU (Germany)	Korea, EU (Sweden, France), Mexico, United Arab Emirates, Canada	EU (UK, Germany), Japan, Thailand, Korea ¹³	Hong Kong EU U.S. Israel Canada	0 7.5 3.5 0 0	– – 3.3–3.6 – –	1 1 4 1 4
854020		Television camera tubes; image converters and intensifiers; other photo-cathode tubes	Japan, EU (France, Netherlands), U.S.	EU (UK, France), Japan, Philippines, Colombia, Turkey	Japan, EU (Germany, UK), China, Russia, Israel	EU U.S. Israel Japan Switzerland	2.7 4.7 0 0 (?)	– 3.3–6.0 – – (?)	2 2 1 2 1
	ex	Television camera tubes; image converters and intensifiers; other photo-cathode tubes, for use with articles of headings 85.25	Japan, EU (France, Netherlands), U.S.	EU (UK, France), Japan, Philippines, Colombia, Turkey	Japan, EU (Germany, UK), China, Russia, Israel	EU U.S. Israel Japan Switzerland	2.7 4.7 0 0 (?)	– 3.3–6.0 – – (?)	2 2 1 2 1
854040		Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm	Japan, U.S., China	EU (UK, France), Canada, Japan, Israel, Korea	Japan, China, Indonesia, Canada, India	U.S. EU India Singapore Malaysia	3.0 2.6 0 0 0	– – – – –	1 1 1 2 1
	ex	Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm, for use with articles of headings 85.25	Japan, U.S., China	EU (UK, France), Canada, Japan, Israel, Korea	Japan, China, Indonesia, Canada, India	U.S. EU India Singapore Malaysia	3.0 2.6 0 0 0	– – – – –	1 1 1 2 1
854050		Data/graphic display tubes, black and white or other monochrome	U.S., EU (UK), Hong Kong	EU (France, Italy), Malaysia, Pakistan, Japan, Canada	EU (UK, Netherlands), Japan, China, Brazil, Taiwan	EU U.S. Thailand Australia Hong Kong	2.6 3.0 5.5 0 0	– – 1.0–10.0 – –	1 1 2 1 1
	ex	Data/graphic display tubes, black and white or other monochrome, for use with articles of headings 85.25	U.S., EU (UK), Hong Kong	EU (France, Italy), Malaysia, Pakistan, Japan, Canada	EU (UK, Netherlands), Japan, China, Brazil, Taiwan	EU U.S. Thailand Australia Hong Kong	2.6 3.0 5.5 0 0	– – 1.0–10.0 – –	1 1 2 1 1

¹³ The listed countries are the only countries for which import data are available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854060		Other cathode-ray tubes	Japan, Singapore	Malaysia, EU (France, UK), Saudi Arabia, China, Japan	EU (Germany, UK), Japan, India, Malaysia, Taiwan	Australia Israel EU Japan Singapore	0 0 2.6 0 0	– – – – –	1 1 1 1 1
	ex	Other cathode-ray tubes, for use with articles of headings 85.25	Japan, Singapore	Malaysia, EU (France, UK), Saudi Arabia, China, Japan	EU (Germany, UK), Japan, India, Malaysia, Taiwan	Australia Israel EU Japan Singapore	0 0 2.6 0 0	– – – – –	1 1 1 1 1
854071		Magnetrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	EU (UK), U.S., Japan, China, Korea	EU (Luxembourg, Germany), Hong Kong, Taiwan, Korea, India	EU (UK, Netherlands), Japan, Thailand, China, Malaysia	EU China U.S. Brazil Thailand	2.7 8.0 1.9 18.0 4.0	– – 0–3.7 – 1.0–10.0	1 1 2 1 3
	ex	Magnetrons, for use with articles of headings 85.25	EU (UK), U.S., Japan, China, Korea	EU (Luxembourg, Germany), Hong Kong, Taiwan, Korea, India	EU (UK, Netherlands), Japan, Taiwan, Hong Kong, Korea	EU China U.S. Brazil Thailand	2.7 8.0 1.9 18.0 4.0	– – 0–3.7 – 1.0–10.0	1 1 2 1 3
854072		Klystrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	EU (France), U.S., Japan, Russia	EU (Luxembourg, Germany), Japan, Canada, China, Taiwan	EU (France, Germany), Canada, Japan, China	EU U.S. China Japan Korea	2.7 3.3 8.0 0 8.0	– – – – –	1 1 1 1 1
854079		Other (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	EU (France, Germany, UK), U.S., Japan	EU (UK, Sweden), Canada, India, Korea, China	EU (France, Germany), Japan, Canada, Korea, China	EU U.S. Japan Canada Korea	2.7 3.7 0 0 8.0	– – – – –	1 1 1 1 1
	ex	Other microwave tubes, for use with articles of headings 85.25	EU (France, Germany, UK), U.S., Japan	EU (UK, Sweden), Canada, India, Korea, China	EU (France, Germany), Japan, Canada, Korea, China	EU U.S. Japan Canada Korea	2.7 3.7 0 0 8.0	– – – – –	1 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854081		Receiver or amplifier valves and tubes	EU (France, Slovak Republic, Germany), U.S., Singapore, Russia	EU (Spain, Netherlands), Canada, Japan, Colombia, United Arab Emirates	EU (Slovak Republic, UK), China, Russia, Japan, Switzerland	EU India U.S. China Canada	2.7 10.0 4.2 8.0 0	– – – – –	1 1 1 1 1
	ex	Receiver or amplifier valves and tubes, for use with articles of headings 85.25	EU (France, Slovak Republic, Germany), U.S., Singapore, Russia	EU (Spain, Netherlands), Canada, Japan, Colombia, United Arab Emirates	EU (Slovak Republic, UK), China, Russia, Japan, Switzerland	EU India U.S. China Canada	2.7 10.0 4.2 8.0 0	– – – – –	1 1 1 1 1
854089		Other (Other valves and tubes)	China, Taiwan, EU (Germany, UK), U.S., Japan	EU (Germany, UK), Japan, Hong Kong, Taiwan, Canada	EU (UK, France), China, Russia, Japan, Canada	EU China Japan U.S. Korea	2.7 8.0 0 3.7 8.0	– – – – –	1 1 1 1 4
854091		Of cathode-ray tubes (Parts)	China, Korea, Thailand, Japan	Japan, EU (UK, Belgium), Mexico, Singapore, Taiwan	Japan, EU (France, Germany), Canada, China, Taiwan	Korea Indonesia Malaysia China India	8.0 5.0 0 6.3 10.0	– – – 5.0–8.0 –	4 1 1 3 1
854099		Other (Parts of Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	Japan, EU (France, Netherlands, UK), U.S., Singapore, China	EU (France, Germany), Japan, Canada, India, Korea	EU (Italy, Germany), Japan, China, Canada, Australia	China EU Malaysia U.S. India	8.0 2.7 0 0 10.0	– – – – –	2 1 1 2 1
	ex	Parts of valves and tubes, other than cathode-ray, for use with articles of headings 85.25	Japan, EU (France, Netherlands, UK), U.S., Singapore, China	EU (France, Germany), Japan, Canada, India, Korea	EU (Italy, Germany), Japan, China, Canada, Australia	China EU Malaysia U.S. India	8.0 2.7 0 0 10.0	– – – – –	2 1 1 2 1
854231		Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (Electronic integrated circuits)	U.S., Korea, EU (Germany), Taiwan, Japan	Malaysia, China, Korea, Mexico, Philippines	Costa Rica, Malaysia, China, Taiwan, Japan	China Hong Kong EU U.S. Korea	0 0 0 0 0	– – – – –	1 1 2 1 3

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854232		Memories (Electronic integrated circuits)	Korea, China, Japan, Hong Kong, U.S.	Taiwan, Korea, Singapore, China, Mexico	Taiwan, Singapore, Korea, Japan, China	China Hong Kong Korea EU Japan	0 0 0 0 0	– – – – –	1 1 6 9 7
854233		Amplifiers (Electric integrated circuits)	Hong Kong, Japan, U.S., Singapore, China	Malaysia, China, Hong Kong, Korea, EU (Germany, Italy)	Malaysia, Philippines, Thailand, Taiwan, China	China Hong Kong EU U.S. Malaysia	0 0 0 0 0	– – – – –	1 1 1 1 3
854239		Other (Electronic integrated circuits)	Taiwan, Singapore, Hong Kong, Japan, U.S.	Malaysia, Philippines, Taiwan, Mexico, EU (Germany, UK)	Korea, Malaysia, Taiwan, Philippines, EU (Italy, Germany)	Singapore Hong Kong China EU Japan	0 0 0 0 0	– – – – –	1 1 1 2 3
854310		Particle accelerators	EU (Belgium, Italy), U.S., Japan, Canada	EU (Poland, UK), Japan, Mexico, India, China	Canada, EU (Sweden, France), Korea, Taiwan, Malaysia	China EU Japan U.S. India	5.0 4.0 0 1.9 5.6	– – – – 0–7.5	1 1 1 1 4
854320		Signal generators	Malaysia, EU (Germany, UK), U.S., Japan	EU (UK, Germany), Japan, Mexico, Canada, China	EU (Germany, UK), Japan, Canada, China, Switzerland	EU China Japan U.S. Brazil	3.7 11.5 0 2.6 14.0	– 8.0–15.0 – – –	1 2 2 1 1
854330	ex	Electroplating and electrolysis machines for applying various metals to printed circuits and printed circuit assemblies	EU (Germany, France, Italy), China, U.S., Japan, Hong Kong	Taiwan, EU (Germany, Sweden), Korea, China, Australia	China, EU (Germany, Italy), Japan, Canada, India	China India Russia U.S. Indonesia	0 0 5.0 2.6 5.0	– – – – –	1 1 2 1 2
854370		Other machines and apparatus (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	Japan, EU (Germany, UK), U.S., Korea	EU (UK, Germany), Mexico, Canada, Hong Kong, China	China, Mexico, EU (Germany, UK), Canada, Japan	EU U.S. Japan China Korea	3.0 1.7 0 2.5 6.7	0–3.7 0–2.6 – 0–10.0 0–8.0	5 9 1 4 12

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854370— Cont'd	ex	Articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks	China, EU (Sweden, Netherlands)	EU (Netherlands, Germany), Mexico, Japan, Nigeria, Australia	Japan, Turkey, Thailand, EU (Italy, UK), China	EU U.S. Japan China Korea	3.0 1.7 0 2.5 6.7	0–3.7 0–2.6 – 0–10.0 0–8.0	5 9 1 4 12
	ex	Microwave amplifiers	China, EU (Germany, UK, Netherlands), Japan, U.S., Korea	EU (Germany, UK), India, Japan, Korea, Malaysia	EU (Germany, UK), Canada, Japan, Malaysia, Korea	EU U.S. Japan China Korea	3.0 1.7 0 2.5 6.7	0–3.7 0–2.6 – 0–10.0 0–8.0	5 9 1 4 12
854390		Parts (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	Singapore, Hong Kong, U.S.	Singapore, EU (Germany, UK), Malaysia, Taiwan, Korea	Japan, EU (Germany, UK), China, Canada, Taiwan	Singapore EU U.S. Hong Kong China	0 3.7 1.2 0 0	– – 0–2.6 – –	6 1 9 1 6
	ex	Parts of signal generators; electroplating and electrolysis machines for copper to printed circuits and printed circuit substrates; articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks; microwave amplifiers; and electrical machines with translation or dictionary functions. Printed circuit assemblies for parts of equipment in 8543	Singapore, Hong Kong, U.S.	EU (Germany, UK), Mexico, Korea, United Arab Emirates, Canada	EU (UK, Germany), China, Japan, Mexico, Canada	Singapore EU U.S. Hong Kong China	0 3.7 1.2 0 0	– – 0–2.6 – –	6 1 9 1 6
854411		Of copper (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	U.S., EU (Germany, Italy), China, Malaysia, Mexico	Mexico, Canada, EU (UK, Germany), China, Hong Kong	Mexico, Canada, Indonesia, EU (Germany, Portugal), China	EU China U.S. Hong Kong Mexico	3.7 10.0 3.5 0 5.0	– – – – –	2 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854419		Other (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	Hong Kong, Korea, China, U.S., EU (Italy)	Mexico, Canada, EU (UK, Germany), Hong Kong, China	Mexico, EU (Germany, UK), China, Taiwan, India	EU India Hong Kong Malaysia Indonesia	3.7 7.5 0 5.0 8.3	– – – – 5.0–10.0	1 4 1 1 3
854420		Coaxial cable and other coaxial electric conductors	China, U.S., EU (Germany, Spain, France, Italy), Mexico, Malaysia	Mexico, Canada, EU (UK, Germany), China, Brazil	China, Mexico, EU (Germany, UK), Canada, Taiwan	EU U.S. Malaysia Singapore Mexico	3.7 5.3 21.7 0 2.5	– – 5.0–30.0 – 0–5.0	1 1 3 4 4
854442		Fitted with connectors (Other electric conductors, for a voltage not exceeding 1,000 V)	China, Hong Kong, EU (Germany, Hungary, Czech Republic), U.S., Mexico	Mexico, Canada, EU (UK, Germany), Honduras, China	China, Mexico, EU (Germany, UK), Taiwan, Japan	EU U.S. Japan Hong Kong Mexico	1.7 0.9 0 0 4.2	0–3.3 0–2.6 – – 0–5.0	2 3 3 4 6
854449		Other (Other electric conductors, for a voltage not exceeding 1,000 V)	China, EU (Germany, Italy, Poland, Spain), U.S., Turkey, Japan	Mexico, Canada, EU (UK, Germany), China, Hong Kong	Mexico, Canada, China, EU (Germany, Poland), Taiwan	EU U.S. Mexico China Canada	3.0 3.2 4.3 4.5 1.3	0–3.7 0–5.3 0–5.0 0–12.0 0–2.5	5 4 7 4 2
854460		Other electric conductors, for a voltage exceeding 1,000 V (Other electric conductors, for a voltage not exceeding 1,000 V)	U.S., Korea, EU (Germany, France, Italy, Sweden), China, Norway	Canada, Mexico, China, Ecuador, EU (UK, Germany)	EU (Poland, Italy), Mexico, Canada, China, Korea	EU Russia U.S. Canada China	3.7 20.0 3.5 2.5 11.2	– – 3.2–3.7 0–4.0 8.4–21.0	2 2 3 3 5
854519		Other (Electrodes) (Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon, with or without metal, of a kind used for electrical purposes.)	China, EU (Germany), U.S., Japan, Norway	Canada, Hong Kong, Korea, China, EU (Belgium, Germany)	EU (UK, France), China, Canada, India, Taiwan	EU Canada Norway Russia India	2.7 0 0 15.0 7.5	– – – – –	1 5 2 2 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
854590	ex	Other carbon, with or without metal, of a kind used for electrical purpose (excluding carbons rod, electrodes, brushes)	EU (Germany), Japan, China	Indonesia, EU (Belgium, France), Taiwan, Canada, Mexico	China, EU (Germany, Poland), Mexico, Japan, Canada	U.S. China EU Korea Malaysia	0 10.5 2.2 8.0 0	– – 1.7–2.7 – –	2 1 2 2 1
854710	ex	Insulated fittings of ceramics for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	EU (Germany), Japan, China, Korea, U.S.	Mexico, China, Canada, EU (Germany, Sweden), South Africa	Japan, China, EU (Germany, UK), Mexico, Korea	EU China Mexico U.S. Japan	4.7 8.0 0 3.0 0	– – – – –	1 1 7 2 1
854790	ex	Quartz or fused silica insulated fittings for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	U.S., Japan, EU (Germany, Netherlands, UK), Taiwan, Korea	Taiwan, Mexico, EU (Germany, France), Korea, Singapore	China, Canada, Japan, EU (France, Germany), India	EU China India Indonesia U.S.	3.7 9.0 7.5 7.5 4.6	– 8.0–10.0 – 5.0–10.0 –	1 2 3 2 1
880260	ex	Communications satellites	EU (France, Germany, Italy), Japan, Ukraine	Japan ¹⁴	Ukraine, Russia ¹⁵	EU U.S. Malaysia India Tanzania	4.2 0 0 10.0 0	– – – – –	2 2 2 1 1
880390	ex	Parts of communications satellites	EU (UK, France, Italy, Germany), U.S., Israel, India	EU (France, Italy), Japan, Korea, Canada, Argentina	Japan, EU (UK, Sweden), Canada, Switzerland, Norway	EU U.S. Jordan Singapore India	1.9 0 10.0 0 10.0	1.7–2.7 – – – –	4 2 1 3 1
900110		Optical fibres, optical fibre bundles and cables	U.S., Japan, India, China, EU (Germany)	EU (France, Germany), China, Japan, Russia, Mexico	EU (Denmark, UK), Japan, China, Mexico, Canada	EU China U.S. Hong Kong Japan	2.9 5.0 6.7 0 0	– – – – –	2 1 1 1 2
900120		Sheets and plates of polarising material	Japan, Korea, Taiwan, China	Japan, Korea, Taiwan, China, Mexico	Japan, Korea, China, EU (Germany, Italy), Taiwan	China Korea Hong Kong EU Japan	8.0 8.0 0 2.9 0	– – – – –	2 1 1 1 1

¹⁴ The listed country is the only country for which U.S. export data were available for this product.¹⁵ The listed countries are the only countries for which U.S. import data were available for this product.

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
900190		Other (Optical fibres and optical fibre bundles; optical fibre cables other than those of heading 85.44; sheets and plates of polarising material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked.)	Japan, China, U.S., Korea	EU (Germany, UK), Japan, Korea, Taiwan, China	China, EU (Germany, UK), Japan, Singapore, Canada	China EU Japan Hong Kong Korea	8.0 2.9 0 0 8.0	– – – – –	6 1 1 2 4
	ex	Optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, lithography equipment, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof (wherever classified), or telecommunications equipment or parts or accessories of any of the foregoing	China, Japan, Singapore	EU (Germany, UK), Japan, Korea, Taiwan, China	China, EU (Germany, UK), Japan, Singapore, Canada	China EU Japan Hong Kong Korea	8.0 2.9 0 0 8.0	– – – – –	6 1 1 2 4
	ex	Optical films cut to shape and size for the manufacture of LCD / LED displays and screens	China, Japan, Singapore	EU (Germany, UK), Japan, Mexico, China, Korea	China, EU (Germany, UK), Singapore, Japan, Canada	China EU Japan Hong Kong Korea	8.0 2.9 0 0 8.0	– – – – –	6 1 1 2 4
900211		For cameras, projectors or photographic enlargers or reducers (Objective lenses)	Japan, China	EU (Germany, UK), Canada, Hong Kong, Mexico, Panama	Japan, China, Malaysia, EU (Germany, UK), Taiwan	EU U.S. China Hong Kong Japan	6.7 1.6 12.7 0 0	– 0–2.5 8.0–15.0 – –	1 3 6 2 2
900219		Other (Objective lenses)	Japan, China	EU (UK, Netherlands), Korea, Japan, Taiwan, Singapore	Japan, EU (Germany, Netherlands), Canada, Singapore, China	China Hong Kong EU Japan U.S.	15.0 0 6.7 0 2.3	– – – – –	3 2 1 1 1
900220		Filters (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	Korea, Japan, U.S.	EU (Germany, UK), Hong Kong, Canada, Japan, Singapore	Japan, EU (Germany, UK), China, Korea, Taiwan	EU Japan China Thailand U.S.	6.7 0 15.0 5.0 2.5	– – – – 2.0–2.9	1 1 2 4 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
900290		Other (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	EU (Germany), China, Japan	EU (Germany, Netherlands), Japan, Korea, Singapore, China	EU (Germany, UK), China, Japan, Singapore, Canada	EU China U.S. Hong Kong Korea	6.7 15.0 1.2 0 6.3	– – 0–3.0 – 3.0–8.0	1 2 8 2 3
900661		Discharge lamp ("electronic") flashlight apparatus	Japan, China, Hong Kong, EU, Switzerland	Hong Kong, Canada, Panama, EU (UK, Germany), Mexico	Japan, China, EU (Sweden, Germany), Taiwan, Switzerland	EU U.S. China Japan Hong Kong	3.2 0 18.0 0 0	– – – – –	1 1 1 1 1
900669		Other (Parts and accessories) (Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 85.39.)	China, Japan, Hong Kong, Singapore	Paraguay, Hong Kong, Israel, EU (Netherlands, UK), Korea	China, EU (Germany, Ireland), Japan, Singapore, Switzerland	Hong Kong China EU U.S. Singapore	0 18.0 3.2 0 0	– – – – –	1 2 1 1 1
900820		Microfilm, microfiche or other microform readers, whether or not capable of producing copies	U.S., EU (Netherlands, Germany)	EU (Germany, UK), Canada, Japan, South Africa, Venezuela	Japan, EU (Netherlands, Germany), Israel, China, Australia	EU U.S. Canada Japan Hong Kong	3.7 1.8 3.0 0 0	– 0–3.5 0–6.0 – –	1 2 2 1 1
900830		Other image projectors	Thailand, Singapore, U.S., China	EU (UK, Italy), Hong Kong, Canada, China, Korea	China, EU (Italy, Germany), Canada, Japan, Taiwan	EU Singapore U.S. Japan Hong Kong	3.7 0 4.6 0 0	– – – – –	1 1 1 1 1
900840		Photographic (other than cinematographic) enlargers and reducers	Malaysia, EU (UK, Denmark)	EU (UK, Germany), Japan, Australia, Canada, Israel	EU (Germany, Denmark), Korea, Japan, Malaysia, China	EU Thailand Singapore U.S. Canada	3.7 10.0 0 0 0	– – – – –	1 2 2 1 1
900890		Parts and accessories (Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers.)	China, Malaysia, Singapore	EU (UK, Germany), Japan, China, Venezuela, Hong Kong	Taiwan, Hong Kong, China, Japan, Singapore	Singapore U.S. EU Japan Thailand	0 1.5 3.7 0 10.0	– 0–2.9 – – –	2 2 1 2 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901050		Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes	U.S., Japan, EU (France, Belgium, Germany), Taiwan	Mexico, EU (Germany, Ireland), Japan, Hong Kong, Brazil	EU (Germany, UK), Japan, China, Korea, Taiwan	China Korea EU U.S. Russia	13.4 4.0 2.7 1.4 5.0	8.4–17.0 0–8.0 – 0–4.5 –	4 2 1 6 1
901060		Projection screens	China, U.S., EU (Denmark, Germany)	Canada, EU (UK, Netherlands), Mexico, China, India	China, Canada, Japan, EU (Denmark, Austria), Switzerland	EU U.S. Canada Japan China	2.7 2.6 0 0 14.0	– – – – –	1 1 1 1 1
901090		Parts and accessories (Apparatus and equipment for photographic (including cinematographic) laboratories, not specified or included elsewhere in this Chapter; negatoscopes; projection screens.)	Japan, EU (Germany, France, Belgium), U.S., Switzerland	EU (Germany, Netherlands), Venezuela, Peru, Canada, Brazil	Japan, Canada, EU (Germany, Italy), China, Singapore	EU U.S. Singapore Korea China	2.7 3.2 0 2.7 0	– 2.9–3.4 – 0–8.0 –	1 2 3 3 3
	ex	Parts and accessories for articles in 9010.50 and 9010.60.	Japan, EU (Germany, France, Belgium), U.S., Switzerland	EU (Germany, Netherlands), Venezuela, Peru, Canada, Brazil	Japan, Canada, EU (Germany, Italy), China, Singapore	EU U.S. Singapore Korea China	2.7 3.2 0 2.7 0	– 2.9–3.4 – 0–8.0 –	1 2 3 3 3
901110		Stereoscopic microscopes	EU (Germany), China, Japan	EU (UK, Germany), Brazil, Mexico, Canada, Hong Kong	EU (Germany, UK), Singapore, China, Japan, India	U.S. Japan EU China Russia	5.6 0 3.4 0 5.0	3.9–7.2 – 0–6.7 – –	2 1 2 1 1
901120		Other microscopes, for photomicrography, cinephotomicrography or microprojection	Japan, U.S., EU (Germany)	EU (Germany, UK), Japan, Canada, China, Australia	China, EU (Germany, Netherlands), Israel, Japan, Taiwan	China Japan EU U.S. Russia	0 0 3.4 5.6 5.0	– – 0–6.7 3.9–7.2 –	1 1 2 2 1
901180		Other microscopes (Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection.)	EU (Germany), Japan, China	Singapore, EU (UK, France), Canada, China, Mexico	EU (Germany, UK), China, Japan, Philippines, India	EU China U.S. Korea Russia	6.7 7.0 6.4 8.0 5.0	– – – – –	1 1 1 6 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901190		Parts and accessories (Compound optical microscopes, including those for photomicrography, cinephotomicrography or microprojection.)	Singapore, EU (Germany), Japan	EU (Germany, UK), Brazil, Japan, Canada, Dominican Republic	Japan, EU (Germany, UK), China, Canada, Philippines	EU U.S. Japan Singapore Hong Kong	3.4 5.7 0 0 0	0–6.7 – – – –	2 1 1 1 1
901210		Microscopes other than optical microscopes; diffraction apparatus	Japan, EU (Czech Republic, Netherlands)	EU (Germany, France), China, Japan, Taiwan, Brazil	EU (Germany, Czech Republic), Japan, China, Switzerland, Russia	EU China Korea U.S. Russia	1.9 0 5.3 3.5 5.0	0–3.7 – 0–8.0 – –	2 1 3 1 1
901290		Parts and accessories (Microscopes other than optical microscopes; diffraction apparatus.)	U.S., EU (Netherlands, Germany), Japan	EU (Netherlands, Germany), Japan, China, Korea, Singapore	EU (Germany, Netherlands), Japan, China, Israel, Switzerland	EU U.S. Japan Singapore Malaysia	1.9 4.9 0 0 0	0–3.7 – – – –	2 1 1 1 1
901310		Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.	Israel, U.S., EU (France), Japan	United Arab Emirates, EU (UK, Germany), Canada, Australia, Afghanistan	China, Philippines, Japan, EU (UK, Germany), Canada	EU U.S. Canada Japan Norway	4.7 7.2 0 0 0	– 1.4–14.9 – – –	1 3 1 1 1
901320		Lasers, other than laser diodes	EU (Germany), U.S.	EU (Netherlands, Germany), Japan, Korea, China, Taiwan	EU (Germany, UK), Japan, Thailand, China, Canada	EU China U.S. Japan Korea	4.7 6.0 3.1 0 8.0	– – – – –	1 3 1 2 1
	ex	Lasers and light sources and parts thereof for the manufacture of semiconductors or flat panel displays	EU (Germany), U.S.	EU (Netherlands, Germany), Japan, Korea, China, Taiwan	EU (Germany, UK), Japan, Thailand, China, Canada	EU China U.S. Japan Korea	4.7 6.0 3.1 0 8.0	– – – – –	1 3 1 2 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901380		Other devices, appliances and instruments (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	Korea, China, Taiwan	EU (Germany, UK), Mexico, Japan, Canada, United Arab Emirates	Canada, China, EU (UK, Sweden), Japan, Korea	China EU Hong Kong Korea Mexico	7.8 1.6 0 6.7 0	5.0–12.0 0–4.7 – 0–8.0 –	5 3 4 12 2
901390		Parts and Accessories (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	Taiwan, China	EU (Germany, Netherlands), Korea, Japan, Taiwan, Singapore	EU (Germany, UK), Canada, Japan, Taiwan, China	China Hong Kong Mexico EU Korea	7.0 0 0 2.4 4.0	6.0–8.0 – – 0–4.7 0–8.0	2 2 1 2 2
	ex	Parts and accessories for flat panel displays, liquid crystal displays, attenuator fiber optic for telecommunication networks, and laser and light sources designed for the manufacture of semiconductor or flat panel displays	Taiwan, Japan, China	EU (Germany, Netherlands), Korea, Japan, Taiwan, Singapore	EU (Germany, UK), Canada, Taiwan, Japan, China	China Hong Kong Mexico EU Korea	7.0 0 0 2.4 4.0	6.0–8.0 – – 0–4.7 0–8.0	2 2 1 2 2
901410		Direction finding compasses	U.S., EU, Japan, Switzerland	EU (Germany, France), Israel, Korea, Canada, Saudi Arabia	EU (France, UK), Mexico, China, Switzerland, Japan	EU U.S. Korea Canada China	2.7 1.2 8.0 1.5 2.0	– 0–4.0 – 0–3.0 –	1 6 5 2 1
901420		Instruments and appliances for aeronautical or space navigation (other than compasses)	EU, Canada, U.S., Singapore, Malaysia	Canada, EU (Germany, Italy), Japan, Korea, Malaysia	EU (France, UK), Canada, Malaysia, Japan, South Africa	EU U.S. Canada Japan Singapore	3.7 1.0 0 0 0	– 0–3.3 – – –	2 6 1 1 1
901480		Other optical navigational instruments	U.S., EU, Japan, Mexico, China	EU (UK, France), Canada, Turkey, Korea, Taiwan	EU (Germany, Hungary), Mexico, China, Taiwan, Japan	EU U.S. China Korea Australia	3.7 1.5 2.0 8.0 0	– 0–3.2 – – –	1 4 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901480— Cont'd	ex	Other optical navigational instruments, excluding ships' logs and depth-sounding apparatus	U.S., EU, Japan, Mexico, China	EU (UK, Germany), Korea, Taiwan, Canada, Japan	EU (Hungary, Germany), China, Japan, Canada, Korea	EU U.S. China Korea Australia	3.7 1.5 2.0 8.0 0	– 0–3.2 – – –	1 4 1 1 1
901490		Parts and accessories (Direction finding compasses; other navigational instruments and appliances; parts and accessories thereof)	U.S., EU, Japan, Canada, Singapore	EU (France, UK), Canada, Australia, Singapore, Turkey	EU (France, UK), Canada, Mexico, Malaysia, Norway	EU U.S. Japan Canada Singapore	2.7 0 0 0 0	– – – – –	1 4 1 1 2
901510		Rangefinders	China, Switzerland, EU (Germany)	EU (Italy, Sweden), Canada, United Arab Emirates, Israel, China	China, EU (France, UK), Japan, Switzerland, Israel	EU U.S. Switzerland Canada Thailand	3.2 1.4 (?) 0 3.0	2.7–3.7 0–2.8 (?) – –	2 2 1 1 2
901520		Theodolites and tachymeters (tachometers)	Japan, Switzerland, China	Saudi Arabia, Brazil, EU (Finland, Germany), Mexico, Canada	Japan, EU (Sweden, Germany), Switzerland, China, Norway	EU U.S. Switzerland Russia Canada	3.2 1.4 (?) 15.0 0	2.7–3.7 0–2.8 (?) – –	2 2 1 3 1
901530		Levels	EU (Germany), Switzerland, China	EU (Germany, Netherlands), Canada, Australia, Mexico, Switzerland	China, Japan, EU (Germany, UK), Malaysia, Switzerland, Singapore	EU U.S. Switzerland Hong Kong Australia	3.2 1.4 (?) 0 0	2.7–3.7 0–2.8 (?) – –	2 2 1 1 1
901540		Photogrammetrical surveying instruments and appliances	EU (UK, Germany), U.S.	Colombia, Peru, China, Argentina, Canada	EU (Austria, Germany), Canada, Switzerland, China, Norway	EU U.S. South Africa Norway Canada	3.2 1.5 0 0 0	2.7–3.7 0–3.0 – – –	2 2 1 2 1
901580		Other instruments and appliances	U.S., EU (UK, France)	EU (UK, Netherlands), Norway, Canada, China, United Arab Emirates	EU (France, UK), Canada, Norway, China, Singapore	U.S. EU China Canada Singapore	0.9 3.1 5.0 3.3 0	0–2.8 2.7–3.7 – 0–6.5 –	3 5 1 3 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901590		Parts and accessories (Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders; parts and accessories thereof)	U.S., EU (UK)	EU (UK, Netherlands), Canada, China, Norway, Iraq	EU (France, Germany), China, Canada, Japan, Malaysia	EU U.S. China Singapore Norway	2.7 (?) 5.0 0 0	– (?) – – –	1 1 1 1 2
901600		Balances of a sensitivity of 5 cg or better, with or without weights.	EU (Germany), Japan, China	Canada, EU (Germany, UK), Mexico, Japan, Brazil	Switzerland, EU (Germany, Italy), China, Japan, Korea	EU U.S. China India Japan	3.7 3.4 9.8 10.0 0	– 2.9–3.9 9.0–10.5 – –	2 3 2 3 1
901730	ex	Micrometers	Japan, China, U.S.	EU (UK, Germany), Mexico, Canada, China, Japan	Japan, China, EU (Germany, UK), Switzerland, Brazil	EU U.S. China Mexico Thailand	2.7 4.9 8.0 7.5 3.0	– 3.9–5.8 – 0–15.0 –	1 2 1 2 1
901780	ex	Other instruments for measuring length	China, EU (Germany), U.S.	Canada, EU (UK, Belgium), Japan, China, Australia	China, Thailand, Korea, Taiwan, Mexico	EU U.S. Singapore Japan China	2.7 5.3 0 0 8.0	– – – – –	2 1 1 1 1
901790		Parts and accessories of 90.17	China, Japan, U.S., EU (Germany)	Canada, Mexico, Venezuela, EU (UK, Slovak Republic), China	None reported	Singapore EU China Japan India	0 2.7 0 0 5.0	– – – – –	4 1 1 1 1
901811		Electro-cardiographs	U.S., EU (UK, Germany), Canada	EU (Germany, UK), Canada, Japan, Korea, India	Canada, EU (Germany, Austria), Japan, India, Hong Kong	EU U.S. Canada Japan Russia	0 0 0 0 5.0	– – – – –	1 3 3 1 1
901812		Ultrasonic scanning apparatus	U.S., Japan, China, EU (Germany)	EU (Germany, France), China, Japan, Australia, Canada	Korea, EU (Austria, France), Japan, China, Malaysia	EU China Russia U.S. Japan	0 5.7 5.0 0 0	– 5.0–7.0 – – –	1 3 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
901813		Magnetic resonance imaging apparatus	EU (Germany, UK), U.S.	EU (Netherlands, France), Japan, China, Singapore, Brazil	EU (Germany, Netherlands), Japan, China, Israel, Australia	EU China U.S. Japan Russia	0 4.0 0 0 5.0	– – – – –	1 1 1 2 1
901814		Scintigraphic apparatus	EU (Germany), U.S.	EU (Netherlands, Germany), China, Korea, Canada, Brazil	Israel, EU (Hungary, Denmark), Canada, New Zealand, South Africa	EU China Brazil U.S. Japan	0 5.0 7.0 0 0	– – 0–14.0 – –	1 1 2 1 2
901819		Other (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	U.S., Japan, EU (Germany)	EU (Germany, Netherlands), Japan, China, Canada, Australia	EU (Germany, Netherlands), Japan, China, Mexico, Israel	U.S. EU Japan Canada China	0 0 0 0 4.0	– – – – –	4 2 3 3 4
901820		Ultra-violet or infra-red ray apparatus	U.S., EU (Germany, UK)	EU (Netherlands, UK), Japan, Canada, Hong Kong, China	EU (Austria, Germany), Canada, China, Japan, Mexico	EU U.S. Brazil Russia Hong Kong	0 0 4.7 7.5 0	– – 0–14.0 5.0–10.0 –	1 1 3 2 1
901849		Other (Other instruments and appliances, used in dental sciences)	EU (Germany), Switzerland, U.S.	EU (Germany, Italy), Canada, Japan, Australia, Switzerland	EU (Germany, Sweden), Switzerland, Japan, Canada, China	EU U.S. Canada Japan Switzerland	0 0 0 0 0	– – – – –	2 2 1 3 1
901850		Other ophthalmic instruments and appliances	U.S., EU (Germany)	EU (Germany, France), Japan, Canada, China, India	EU (Germany, UK), Japan, Switzerland, Taiwan, China	EU U.S. Japan China India	0 0 0 4.0 7.5	– – – – –	2 1 2 1 4
901890		Other instruments and appliances (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	U.S., EU (Germany, Belgium, France), Mexico	EU (Netherlands, Germany), Japan, Mexico, Canada, Australia	Mexico, EU (Germany, Ireland), Costa Rica, Dominican Republic, China	EU U.S. Japan China Mexico	0 0 0 4.0 5.6	– – – – 0–15.0	8 10 6 9 32

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
902212		Computed tomography apparatus	U.S., EU (Germany), Japan, China	EU (France, Italy), China, Japan, Hong Kong, Brazil	EU (Germany, Italy), Japan, China, Israel, Korea	EU China U.S. Russia Japan	0 4.0 0 5.0 0	– – – – –	1 1 1 1 1
902213		Other, for dental uses (Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	EU (Finland, Germany), U.S.	EU (Germany, UK), Canada, Japan, Australia, Brazil	EU (Finland, France), Japan, Korea, Dominican Republic, China	EU U.S. Japan Canada China	0 0 0 0 4.0	– – – – –	1 1 1 1 1
902214		Other, for medical, surgical or veterinary uses ((Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	EU (Germany, Netherlands), U.S.	EU (Belgium, Germany), China, Japan, Canada, Korea	EU (Germany, Netherlands), Japan, Canada, China, Israel	U.S. EU China Japan Russia	0 0 4.0 0 5.0	– – – – –	1 1 1 2 1
902219		For other uses (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	EU (Germany), U.S., Japan	EU (UK, Germany), Japan, Mexico, China, Canada	EU (Germany, UK), Japan, Malaysia, China, Switzerland	EU China U.S. Korea Singapore	0 4.0 0 8.0 0	– – – – –	1 2 1 3 2
902221		For medical, surgical, dental or veterinary uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	Israel, U.S., EU (Sweden)	EU (France, Belgium), Russia, China, Japan, Canada	EU (Belgium, Sweden), China, Canada, Japan, Australia	EU Russia Korea U.S. Japan	0 5.0 8.0 0 0	– – – – –	1 1 5 1 1
902229		For other uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	EU (Germany, UK), U.S., Mexico	Mexico, Canada, EU (Lithuania, UK), China, Japan	China, Mexico, EU (Germany, UK), Japan, Taiwan	U.S. EU China India Mexico	1.2 2.1 6.0 7.5 0	1.0–1.4 – – – –	2 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
902230		X-ray tubes	EU (Germany, Netherlands), U.S.	EU (France, Netherlands), Japan, China, Singapore, Mexico	EU (Germany, France), Mexico, Japan, India, Switzerland	EU U.S. China Japan Singapore	2.1 0.9 2.0 0 0	– – – – –	1 1 1 2 1
902290		Other, including parts and accessories (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	EU (Germany, France), U.S.	EU (Germany, France), Japan, China, Canada, Hong Kong	EU (Germany, France), Japan, Switzerland, China, Israel	EU U.S. Japan China Singapore	2.1 1.0 0 6.0 0	– 0.8–1.4 – – –	1 7 3 3 2
902300		Instruments, apparatus and models, designed for demonstrational purposes (for example, in education or exhibitions), unsuitable for other uses.	China, U.S., EU (Germany)	EU (UK, Germany), Canada, Japan, China, Mexico	EU (Germany, UK), Norway, China, Canada, Japan	EU U.S. Japan China Algeria	1.4 0 0 7.0 5.0	– – – – –	2 1 1 1 1
902410		Machines and appliances for testing metals	EU (Germany), U.S.	China, EU (UK, France), Canada, Saudi Arabia, Korea	EU (Germany, UK), China, Canada, Switzerland, Japan	EU China Korea U.S. Thailand	2.9 7.0 8.0 1.7 0	2.1–3.2 – – – –	4 3 7 1 2
902480		Other machines and appliances (Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	U.S., EU (Germany, UK)	China, EU (Germany, UK), Korea, Canada, India	EU (UK, Germany), Japan, Canada, Switzerland, China	EU China India U.S. Hong Kong	2.8 5.0 7.5 1.7 0	2.1–3.2 – – – –	3 1 3 1 1
902490		Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	U.S., EU (Germany, UK)	EU (Germany, UK), China, Saudi Arabia, Canada, Korea	EU (UK, Germany), Canada, China, Switzerland, Japan	EU U.S. Hong Kong Canada Singapore	2.1 1.7 0 0 0	– – – – –	1 1 1 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
902511		Liquid-filled, for direct reading (Thermometers and pyrometers, not combined with other instruments)	China, EU (Germany), U.S.	Canada, China, EU (Germany, UK), South Africa, India	China, EU (Germany, UK), Taiwan, Canada, Japan	EU U.S. Russia Canada China	1.4 0 6.3 1.8 4.0	0–2.8 – 5.0–10.0 0–3.5 –	2 2 4 2 1
902519		Other (Thermometers and pyrometers, not combined with other instruments)	EU (Germany, Sweden), China, U.S.	EU (Germany, UK), Canada, Korea, Mexico, Taiwan	China, EU (Germany, France), Mexico, Japan, Canada	EU U.S. China Hong Kong Japan	2.7 0.8 8.4 0 0	2.1–3.2 0–1.8 – – –	2 4 2 1 2
902580		Other instruments (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	U.S., China, EU (Germany, Finland)	EU (Netherlands, Germany), Canada, China, Singapore, Mexico	China, EU (Finland, Germany), Switzerland, Mexico, Canada	EU U.S. China Canada Japan	2.5 0.8 11.0 1.8 0	2.1–3.2 0–2.9 – 0–3.5 –	3 12 1 2 1
902590		Parts (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	Japan, U.S., China, EU (Germany)	Canada, EU (Belgium, Germany), Mexico, China, Japan	Mexico, China, EU (Belgium, UK), Canada, Singapore	EU China U.S. Japan Korea	3.2 8.0 0 0 8.0	– – – – –	1 1 2 1 4
902710		Gas or smoke analysis apparatus	EU (Germany, UK), U.S.	EU (Germany, UK), Canada, China, Brazil, Mexico	EU (Germany, UK), Japan, Canada, Mexico, Korea	EU U.S. China Canada Brazil	2.5 2.5 7.0 0 14.0	– 1.7–3.5 – – –	2 3 1 1 1
902750		Optical radiations (UV, visible, IR)	U.S., EU (Germany)	EU (Germany, Netherlands), China, Japan, Canada, Hong Kong	EU (Germany, Sweden), Japan, China, Singapore, Canada	EU U.S. China Canada Russia	0 0.4 0 0 10.0	– 0–1.2 – – –	1 3 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
902780		Other instruments and apparatus (Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes)	U.S., EU (Germany), Japan	EU (Germany, Belgium), China, Canada, Japan, Korea	EU (Germany, UK), Singapore, Japan, China, Taiwan	EU China U.S. Japan Hong Kong	0.4 3.5 0 0 0	0–2.5 0–14.0 – – –	6 4 3 3 1
902790		Microtomes; parts and accessories	U.S., Japan, EU (Germany)	EU (Germany, Netherlands), Canada, Singapore, China, Japan	EU (Germany, UK), Japan, China, Switzerland, Singapore	EU U.S. Singapore Japan China	1.7 1.2 0 0 0	0–2.5 0–3.5 – – –	3 8 3 2 1
902810		Gas meters	EU (Germany)	Canada, EU (UK, Germany), Pakistan, China, Australia	EU (Germany, UK), Mexico, China, Canada, Japan	EU Azerbaijan Canada Russia Algeria	2.1 (⁸) 0 5.0 5.0	– (⁸) – – –	1 (⁸) 1 1 1
902820		Liquid meters	EU (Germany), China	Canada, Mexico, EU (Italy, Germany), China, Ecuador	Mexico, Israel, EU (Germany, France), Japan, Malaysia	EU U.S. Russia Mexico China	2.1 (⁷) 5.0 7.5 10.0	– (⁷) – 0–15.0 –	1 1 1 4 2
902830		Electricity meters	Mexico, China, U.S.	Canada, Mexico, EU (France, UK), New Zealand, Ecuador	Mexico, China, Canada, EU (UK, Netherlands), Israel	EU U.S. Canada Australia Hong Kong	2.1 (⁷) 0 5.0 0	– (⁷) – – –	3 1 1 1 6
902890		Parts and accessories (Gas, liquid or electricity supply or production meters, including calibrating meters therefor)	China, Mexico, U.S., EU (Germany)	Mexico, Canada, EU (UK, Romania), China, Hong Kong	Mexico, China, Israel, EU (UK, Germany), India	EU U.S. Mexico Japan Canada	2.1 3.2 0 0 2.0	– – – – 0–4.0	2 1 3 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
902910		Revolution counters, production counters, taximeters, mileometers, pedometers and the like	EU (Germany, Hungary), China	EU (Netherlands, UK), Mexico, Canada, Australia, China	China, EU (UK, Germany), Mexico, Switzerland, Canada	EU U.S. China Japan Hong Kong	1.9 2.7 15.0 0 0	– 0–5.3 – – –	1 2 3 1 1
902920		Speed indicators and tachometers; stroboscopes	EU (Germany), Mexico	Canada, Mexico, EU (Germany, France), South Africa, Brazil	Mexico, Japan, EU (Germany, Slovak Republic), China, Switzerland	EU U.S. Canada China Japan	2.6 3.0 0 10.0 0	– 0–6.0 – – –	3 3 2 2 2
902990		Parts and accessories (Revolution counters, production counters, taximeters, mileometers, pedometers and the like; speed indicators and tachometers, other than those of heading 90.14 or 90.15; stroboscopes.)	Japan, China, EU (France, Germany)	Mexico, EU (Hungary, Germany), Canada, China, Brazil	China, Mexico, Japan, EU (UK, Germany), Switzerland	EU U.S. China Japan Mexico	2.2 3.6 6.0 0 0	– 0–6.0 – – –	1 4 1 1 1
903010		Instruments and apparatus for measuring or detecting ionizing radiations	U.S., EU (Germany)	EU (Germany, UK), Japan, China, Canada, Korea	EU (Germany, UK), Canada, Japan, Israel, Singapore	EU U.S. Japan China Canada	4.2 0.8 0 5.0 0	– 0–1.6 – – –	1 2 1 1 2
903020		Oscilloscopes and oscillographs	Malaysia, U.S., China	EU (Germany, France), China, Korea, Japan, Canada	China, Malaysia, Singapore, EU (Germany, Romania), Japan	EU U.S. China Japan Korea	1.6 0.6 6.5 0 8.0	0–4.2 0–1.7 5.0–8.0 – –	4 3 2 1 4
903031		Multimeters without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	EU (Germany), China, U.S.	EU (Netherlands, UK), Canada, Singapore, Australia, China	China, EU (France, Sweden), Korea, Taiwan, Malaysia	EU U.S. Hong Kong Japan Canada	4.2 0.9 0 0 0	– 0–1.7 – – –	1 2 1 1 2
903032		Multimeters with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	China, U.S., EU (France, Denmark, Germany)	EU (Netherlands, Germany), China, Singapore, Canada, Mexico	China, EU (UK, Denmark), Taiwan, Canada, Malaysia	EU U.S. China Korea Japan	0 0.9 8.0 8.0 0	– 0–1.7 – – –	1 2 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
903033		Other, without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	U.S., EU (Germany)	Singapore, EU (Germany, UK), China, Canada, Mexico	EU (Germany, UK), China, Japan, Taiwan, Malaysia	EU U.S. China Canada Japan	2.8 0.9 12.7 0 0	2.1–4.2 0–1.7 9.0–15.0 – –	3 2 3 2 2
903039		Other, with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	U.S., EU (Germany)	EU (Netherlands, Germany), China, Canada, Korea, Mexico	EU (UK, Germany), Canada, Switzerland, China, Japan	China EU U.S. Korea Canada	8.0 0 0.9 8.0 0	– – 0–1.7 – –	1 1 2 7 1
903084		Other, with a recording device (Other instruments and apparatus)	Malaysia, U.S.	EU (Germany, UK), China, Korea, Japan, Canada	EU (Germany, UK), Malaysia, Canada, Japan, China	China EU U.S. Korea Japan	9.0 0 0.9 8.0 0	8.0–10.0 – 0–1.7 – –	2 1 2 1 1
903089		Other (Other instruments and apparatus)	Japan, U.S.	EU (UK, Germany), Hong Kong, China, Mexico, Japan	EU (Germany, Romania), China, Malaysia, Japan, Mexico	EU China Japan U.S. Korea	1.1 11.0 0 0.9 8.0	0–2.1 8.0–14.0 – 0–1.7 –	2 2 4 2 1
903090		Parts and Accessories (Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 90.28; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionising radiations.)	U.S., Japan	China, EU (Germany, UK), Singapore, Malaysia, Taiwan	Malaysia, EU (Germany, France), Japan, China, Thailand	China U.S. Malaysia EU Singapore	3.5 0.7 0 1.3 0	0–7.0 0–1.7 – 0–2.5 –	2 10 1 2 4
903110		Machines for balancing mechanical parts	U.S., EU (Italy, Germany), Japan	EU (France, UK), China, Canada, India, Korea	EU (Italy, Germany), Japan, China, Korea, Norway	EU China Thailand Korea Russia	2.8 7.0 3.0 8.0 15.0	– – – – –	1 1 2 1 1
903120		Test benches	EU (Germany), U.S.	Japan, Korea, China, EU (UK, France), Canada	EU (Germany, France), Japan, Canada, Israel, Switzerland	China EU Russia U.S. Brazil	7.0 2.8 15.0 1.7 14.0	– – – – –	1 1 1 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
903149		Other (Other optical instruments and appliances)	EU (Germany), Israel, Japan, U.S.	EU (Germany, UK), China, Japan, Canada, Singapore	EU (Germany, UK), Canada, Japan, Mexico, China	China EU U.S. Korea Hong Kong	5.0 1.4 2.4 5.7 0	0–10.0 0–2.8 0–3.5 0–8.0 –	2 2 4 7 1
903180		Other instruments, appliances and machines (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	EU (Germany), U.S., Japan	EU (Germany, UK), Canada, Mexico, China, Korea	EU (Germany, UK), Japan, Canada, China, Israel	EU China U.S. Korea Japan	2.7 5.0 0.6 7.3 0	0–4.0 – 0–1.7 0–8.0 –	5 8 3 12 5
903190		Parts and Accessories (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	EU (Germany), U.S.	EU (Netherlands, Germany), Korea, Singapore, Taiwan, China	EU (Germany, UK), Singapore, Canada, Japan, China	EU U.S. China Japan Korea	0.9 1.6 0 0 2.7	0–2.8 0–3.5 – – 0–8.0	3 7 1 2 12
	ex	Parts and accessories in 9031, except for parts for equipment for testing engines	EU (Germany), U.S.	EU (Netherlands, Germany), Korea, Singapore, Taiwan, China	EU (Germany, UK), Singapore, Canada, Japan, China	EU U.S. China Japan Korea	0.9 1.6 0 0 2.7	0–2.8 0–3.5 – – 0–8.0	3 7 1 2 12
903210		Thermostats	EU (Germany), China, Mexico	Canada, Mexico, EU (Germany, UK), China, Hong Kong	Mexico, China, EU (Germany, France), Canada, Israel	EU U.S. China Hong Kong Mexico	2.3 0.9 7.0 0 5.0	2.1–2.8 0–1.7 – – 0–15.0	3 2 1 1 5
	ex	Thermostats for manufacturing of semiconductors or flat panel displays	EU (Germany), China, Mexico	Canada, Mexico, EU (Germany, UK), China, Hong Kong	Mexico, China, EU (Germany, France), Canada, Israel	EU U.S. China Hong Kong Mexico	2.3 0.9 7.0 0 5.0	2.1–2.8 0–1.7 – – 0–15.0	3 2 1 1 5
903220		Manostats	EU (Germany)	Japan, Mexico, Canada, EU (Germany, UK), Turkey	Mexico, EU (Germany, Poland), Canada, Switzerland, Japan	EU Japan U.S. China Brazil	2.8 0 0.9 7.0 18.0	– – 0–1.7 – –	1 1 2 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
903220— Con't	ex	Manostats (automatic regulating or controlling instruments and apparatus) for manufacturing of semiconductors or flat panel displays	EU (Germany)	Japan, Mexico, Canada, EU (Germany, UK), Turkey	Mexico, EU (Germany, Poland), Canada, Switzerland, Japan	EU Japan U.S. China Brazil	2.8 0 0.9 7.0 18.0	– – 0–1.7 – –	1 1 2 1 1
903281		Hydraulic or pneumatic (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	EU (Germany)	EU (UK, Germany), Canada, China, Korea, Saudi Arabia	EU (Germany, UK), China, Canada, Japan, Norway	EU China Turkey U.S. Korea	2.8 7.0 1.4 0.8 6.0	– – 0–2.8 0–1.6 3.0–8.0	1 1 2 2 7
	ex	Process control modules and complete systems	EU (Germany)	EU (UK, Germany), Canada, China, Korea, Saudi Arabia	EU (Germany, UK), China, Canada, Japan, Norway	EU China Turkey U.S. Korea	2.8 7.0 1.4 0.8 6.0	– – 0–2.8 0–1.6 3.0–8.0	1 1 2 2 7
	ex	Automatic regulating or controlling instruments and apparatus of hydraulic or pneumatic for manufacturing of semiconductors or flat panel displays	EU (Germany)	EU (UK, Romania), Saudi Arabia, Singapore, Korea, Canada	EU (Germany, France), China, Canada, Japan, Norway	EU China Turkey U.S. Korea	2.8 7.0 1.4 0.8 6.0	– – 0–2.8 0–1.6 3.0–8.0	1 1 2 2 7
903289		Other (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	EU (Germany), Japan, U.S.	Canada, Mexico, EU (Germany, UK), China, Korea	Mexico, EU (Germany, UK), Japan, Canada, China	EU China U.S. Canada Thailand	2.8 7.0 0.8 0 5.0	– – 0–1.7 – 0–10.0	1 5 6 2 11
	ex	Other automatic regulating or controlling instruments and apparatus for manufacturing of semiconductors or flat panel displays	EU (Germany), Japan, U.S.	Canada, Mexico, EU (Germany, UK), China, Korea	Mexico, EU (Germany, UK), Japan, Canada, China	EU China U.S. Canada Thailand	2.8 7.0 0.8 0 5.0	– – 0–1.7 – 0–10.0	1 5 6 2 11
903290		Parts and accessories (Automatic regulating or controlling instruments and apparatus.)	Japan	Canada, Mexico, EU (Germany, UK), China, Korea	Mexico, EU (Germany, UK), China, Korea, Canada	EU China U.S. Japan Korea	2.8 5.0 0.8 0 6.5	– – 0–1.7 – 5.0–8.0	1 1 6 1 2

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
903290— Cont'd	ex	Parts and accessories, except for parts of thermostats and manostats	Japan	Canada, Mexico, EU (Germany, UK), China, Korea	Mexico, EU (Germany, UK), China, Korea, Canada	EU China U.S. Japan Korea	2.8 5.0 0.8 0 6.5	– – 0–1.7 – 5.0–8.0	1 1 6 1 2
	ex	Parts and accessories (Automatic regulating or controlling instruments and apparatus.) for manufacturing of semiconductors or flat panel displays	Japan	Canada, Mexico, EU (Germany, UK), China, Korea	Mexico, EU (Germany, UK), China, Korea, Canada	EU China U.S. Japan Korea	2.8 5.0 0.8 0 6.5	– – 0–1.7 – 5.0–8.0	1 1 6 1 2
903300		Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.	China, U.S., Singapore, EU (Germany, UK)	Afghanistan, EU (Ireland, UK), Japan, Switzerland, Iraq	EU (UK, Germany), Canada, China, Mexico, Japan	EU China Singapore India Thailand	3.7 6.0 0 7.5 10.0	– – – – –	1 2 2 1 2
	ex	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90 for manufacturing of semiconductors or flat panel displays	China, U.S., Singapore, EU (Germany, UK)	Afghanistan, EU (Ireland, UK), Japan, Switzerland, Iraq	EU (UK, Germany), Canada, China, Mexico, Japan	EU China Singapore India Thailand	3.7 6.0 0 7.5 10.0	– – – – –	1 2 2 1 2
940510	ex	Chandeliers and other electric ceiling or wall lighting fittings using a LED light module as primary light source, excluding those of a kind used for lighting public open spaces or thoroughfares	EU (Germany, Italy), China, U.S., Japan	Canada, Mexico, EU (UK, Germany), Japan, United Arab Emirates	China, Mexico, Canada, EU (Germany, Italy), Taiwan	EU U.S. Canada Japan Russia	3.7 2.6 7.0 0 17.7	2.7–4.7 0–7.6 – – 15.0–20.0	5 6 1 1 13
940520	ex	Electric table, desk, bedside or floor-standing lamps using a LED light module as primary light source	China, EU (Belgium, Italy), U.S.	Canada, EU (UK, France), Mexico, China, Saudi Arabia	China, EU (Italy, France), India, Mexico, Canada	EU U.S. Japan Canada Russia	3.7 4.5 0 7.0 20.0	2.7–4.7 3.7–6.0 – – –	5 3 1 1 12
940530	ex	Lighting sets of a kind used for Christmas trees using LED light modules as primary light source	China	Mexico, China, Canada, EU (UK, Netherlands), Hong Kong	China, Philippines, Indonesia, Hong Kong, Taiwan	U.S. EU Mexico Canada Hong Kong	8.0 3.7 0 7.0 0	– – – – –	1 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
940540	ex	Other electric lamps and lighting fittings using a LED light module as primary light source	Japan, China, U.S.	Canada, EU (UK, Germany), Mexico, China, Saudi Arabia	China, Mexico, EU (Germany, Italy), Canada, Taiwan	EU U.S. Canada Japan Hong Kong	3.7 4.9 4.3 0 0	2.7–4.7 3.9–6.0 0–7.0 – –	7 3 3 2 4
940560	ex	Illuminated signs, illuminated name -plates and the like using a LED light module as primary light source	EU (Germany, France, Italy, UK), China	Canada, EU (UK, Germany), Mexico, Saudi Arabia, Australia	China, Canada, Mexico, EU (Germany, Italy), Korea	EU U.S. Canada Switzerland Norway	3.7 2.8 7.0 (?) 0	2.7–4.7 0–6.0 – (?) –	2 6 1 1 1
940591	ex	Parts of glass for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	China, EU (Italy)	Mexico, Canada, EU (UK, Italy), Saudi Arabia, Dominican Republic	China, EU (Austria, Italy), Mexico, Japan, Turkey	EU U.S. Hong Kong Japan Turkey	4.7 9.0 0 0 4.7	3.7–5.7 4.5–12.0 – – 3.7–5.7	2 4 2 1 4
940592	ex	Parts of plastics for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	China, EU (Italy), Japan, U.S.	Mexico, Canada, EU (Germany, UK), Singapore, Australia	China, EU (Germany, UK), Canada, Mexico, Taiwan	EU U.S. Mexico China Canada	4.7 1.9 5.0 20.0 0	– 0–3.7 – – –	1 2 1 1 1
940599	ex	Other parts for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	China, U.S., EU (Italy), Japan	Canada, Mexico, EU (UK, Germany), Australia, Japan	China, Mexico, EU (Germany, France), Canada, Taiwan	EU U.S. China Japan Korea	2.7 2.5 20.0 0 8.0	– 0–6.0 – – –	1 4 1 3 2
950410		Video games of a kind used with a television receiver	China, EU (Netherlands, Germany, UK), Hong Kong, Singapore	Paraguay, Mexico, Canada, Chile, Brazil	China, Canada, Japan, EU (UK, Spain), Hong Kong	EU U.S. Hong Kong Canada Japan	0 0 0 0 0	– – – – –	1 1 3 1 1
950430		Other games, operated by coins, banknotes, bank cards, tokens or by other means of payment, other than bowling alley equipment	U.S., EU (Austria, UK, Czech Republic), China, Hong Kong, Taiwan, Japan	Canada, EU (Netherlands, UK), Argentina, Mexico, Australia	China, Korea, Mexico, Taiwan, Canada	EU U.S. Hong Kong Canada Japan	0 0 0 0 0	– – – – –	3 1 1 1 1

TABLE 2.1 List of products for proposed expansion of Attachment A, by HS subheading¹—Continued

HS 2007 6-digit code	Ex out	Proposed product description ²	Major producing countries ³	Leading U.S. export markets ⁴	Leading sources of U.S. imports ⁴	Tariffs in major markets ⁵			
						Major markets	Average	Range ⁶	Lines
950490	ex	Video game machines capable of connecting to a wired or wireless network, whether or not portable, other than those of subheading 9504.10, and parts and accessories thereof	China, Hong Kong, EU (Germany, Netherlands, France), Japan	Paraguay, Canada, Brazil, Hong Kong, EU (UK, Austria)	China, Japan, Taiwan, EU (France, Slovenia), Mexico	Hong Kong EU U.S. Japan Canada	0 0 0 0 0	– – – – –	16 2 3 3 2
	ex	Game machines other than coin-operated arcade games and parts and accessories including game controllers, game cartridges, cases, steering wheels, etc.; 'Parts' for hand-held gaming consoles	China, Hong Kong, EU (Germany, Netherlands, France), Japan	Paraguay, Canada, Brazil, Hong Kong, EU (UK, Austria)	China, Japan, Taiwan, EU (France, Slovenia), Mexico	Hong Kong EU U.S. Japan Canada	0 0 0 0 0	– – – – –	16 2 3 3 2
	ex	Electronic games and parts of video, electronic games	China, Hong Kong, EU (Germany, Netherlands, France), Japan	Paraguay, Canada, Brazil, Hong Kong, EU (UK, Austria)	China, Japan, Taiwan, EU (France, Slovenia), Mexico	Hong Kong EU U.S. Japan Canada	0 0 0 0 0	– – – – –	16 2 3 3 2
961210		Ribbons (Typewriter or similar ribbons, inked or otherwise prepared for giving impressions, whether or not on spools or in cartridges; ink - pads, whether or not inked, with or without boxes.)	Japan, EU (Netherlands, France, UK), China	Canada, Mexico, EU (UK, Netherlands), Chile, Panama	EU (Belgium, UK), China, Mexico, Japan, Hong Kong	EU U.S. China Mexico Hong Kong	1.8 4.0 10.5 0 0	0–2.7 0–7.9 – – –	3 2 1 4 1

TABLE 2.2 List of products for proposed expansion of Attachment B, wherever classified¹⁶

2007 Proposed product description ¹⁷	Major producing countries ¹⁸
Multi-chip integrated circuits (MCPs) consisting of two or more interconnected monolithic integrated circuits combined to all intents and purposes indivisibly, whether or not on one or more insulating substrates, with or without lead frames, but with no other active or passive circuit elements, wherever classified.	U.S., EU (Germany), Japan, Taiwan, Singapore
Multi-component integrated circuits (MCOs), wherever classified	U.S., EU (Germany), Japan, Taiwan, Singapore
<p>Multi-component integrated circuits (MCOs) are a combination of one or more monolithic, hybrid, and/or multi-chip integrated circuits with one or more components A classifiable under heading 8532, 8533 or 8541, inductors classifiable under heading 8504, or silicon based MEMSB; formed to all intents and purposes indivisibly into a single body like an integrated circuit, as a component of a kind used for assembly onto a printed circuit board (PCB) or other carrier, through the connecting of pins, leads, balls, lands, bumps, or pads.</p> <p>A: The components may be discrete, manufactured independently then assembled onto the rest of the MCO, or integrated into other components, so they are not outwardly visible.</p> <p>B: Silicon based iv MEMS includes silicon based sensors, actuators, oscillators, resonators and combinations thereof.</p> <p>Silicon based sensors consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantities i and transforming these ii into electric signals, caused by resulting variations[s] in electronic properties iii or displacement of a mechanical structure.</p> <p>Silicon based actuators consist of microelectronic and mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of transforming electrical signals into physical movement.</p> <p>Silicon based resonators and silicon based oscillators consists of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.</p> <p>i Physical quantities relating to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration etc.</p> <p>ii e.g. energy, mechanical displacement, photo-signals, etc.</p> <p>iii e.g. resistance, capacitance</p> <p>iv "Silicon based" refers to devices built on a silicon substrate, or made of silicon materials, or manufactured onto integrated circuit die</p>	U.S., EU (Germany), Japan, Taiwan, Singapore
Set-top boxes, wherever classified	China, Mexico, U.S., EU (Netherlands, France)
Monitors, of liquid crystal display	China, Korea, Japan, EU (Netherlands, Germany)
Liquid crystal modules	China, Korea
LED(light-emitting diode) lamps	Japan, China, U.S.
LED(light-emitting diode) arrays	Japan, China, U.S.

¹⁶ This is a positive list of specific products proposed to be covered by this agreement wherever they are classified in the HS.

¹⁷ Product descriptions in this table are taken directly from the list provided to USITC by USTR, as supplied by ITA participant countries.

¹⁸ As the list of products in this attachment do not have a universally agreed upon set of distinct HS codes, it is not possible to provide trade and tariff information. Major producing countries are provided to the extent possible.

CHAPTER 3

Potential Benefits of Expanding ITA Product Coverage

This chapter outlines the potential benefits to U.S. industry of ITA expansion and provides an overview of how selected key subsectors might benefit from increased market access and export opportunities under an expanded ITA. Benefits from eliminating tariffs accrue both to U.S. industry and to the selected key subsectors. While exporters of products with duty-free treatment are likely to benefit directly, other firms downstream in the supply chain should benefit indirectly from reduced input prices. Consumers also would benefit in the form of lower-priced goods to the extent that suppliers pass through duty savings. To explain these benefits, this chapter first identifies the potential benefits to U.S. industry of expanding ITA product coverage, followed by a brief analysis of potential benefits to selected key subsectors. Five subsectors representing prospective market access opportunities for U.S. exports under ITA product expansion—multi-component integrated circuits (MCOs), medical devices, relay and industrial control equipment, optical media, and loudspeakers and headsets—are profiled.¹

Overview of the Benefits of ITA Expansion

The Ministerial Declaration of the original ITA identified the expected benefits of free trade in information and communications technology (ICT) products, highlighting their positive contributions to global economic growth and welfare.² According to the World Trade Organization (WTO), these products improve business and manufacturing efficiency, thereby increasing overall competitiveness.³ Liberalization of trade in ICT products leads to increased use of such products, which in turn has a direct impact on productivity and growth. According to one estimate, about two-thirds of the acceleration in U.S. labor productivity during the late 1990s was due to the United States' expanding stocks of computer hardware, software, and network infrastructure, coupled with huge efficiency gains in the production of computers and semiconductors.⁴ Expanding the ITA product coverage to provide duty-free treatment to new products and innovations that have been developed in the 16 years since the ITA was negotiated could continue to promote these benefits. A discussion of the potential benefits to U.S. industry from ITA expansion follows, highlighting 2011 trade and tariffs for proposed ITA expansion products and analyzing prospective benefits of tariff liberalization in the global supply chain for ICT products.

¹ See chapter 1 for more details on how these subsectors were selected.

² Ministerial Declaration on Trade in Information Technology Products. Singapore, December 13, 1996. Industry associations such as the Semiconductor Industry Association (SIA) and the Information Technology Industry Council (ITI) submitted testimony to the Commission stating that the ITA has encouraged innovation, accelerated productivity, increased employment, lowered consumer prices, promoted investment, and helped bridge communities throughout the world. ITI, written submission to the USITC, November 20, 2012, 2; SIA, written submission to the USITC, November 20, 2012, 1.

³ WTO, "15 Years of the Information Technology Agreement," 2012, 11.

⁴ Oliner and Sichel, "The Resurgence of Growth in the Late 1990s," 3–22.

Market Access Benefits to U.S. Industry

U.S. exporters of the proposed ITA expansion products⁵ would likely benefit directly if tariffs on such goods were eliminated. In 2011, U.S. firms exported \$179.6 billion of proposed ITA expansion products to the world, and paid estimated duties of \$3.3 billion on entry of those products in foreign markets, at an estimated average ad valorem equivalent (AVE) tariff rate⁶ of 1.85 percent (table 3.1).⁷ Seventy-eight percent (\$140.0 billion) of these exports went to ITA member countries. Among ITA members,

TABLE 3.1 U.S. exports to leading markets, estimated duties, and average ad valorem equivalent tariff rates on proposed ITA expansion products by trading partner, 2011

Country	U.S. exports (million \$)	Estimated duties (million \$)	Average ad valorem equivalent (%)
ITA members total	140,028	2,176	1.55
EU	32,761	581	1.77
Canada ^b	24,967	–	0.00
China ^a	14,283	557	3.90
Korea ^b	9,804	349	3.56
Japan	9,026	13	0.14
Taiwan	7,469	72	0.97
Singapore ^b	6,560	–	0.00
Malaysia	5,797	45	0.78
Hong Kong	4,502	–	0.00
Australia ^b	3,353	–	0.00
Non-ITA members total	39,531	1,138	2.88
Mexico ^b	23,072	–	0.00
Brazil	4,537	487	10.74
Venezuela	1,755	149	8.47
Chile ^b	1,195	–	0.00
Argentina	1,114	136	12.20
Grand total ^c	179,560	3,314	1.85

Sources: Official statistics from USDOC, WTO, and USITC calculations.

^aThis table assumes most-favored-nation (MFN) duties are imposed. In the case of China, a significant share of imports of ITA products from the United States receives duty-free treatment under special customs provisions related to processing trade, bonded trade of entrepôts, and other provisions. Using data provided to USITC by China Customs, 47.8 percent of China's imports of proposed ITA expansion products entered under the ordinary trade regime, and the remainder under special customs regimes. If MFN rates apply only to ordinary trade regimes while other regimes have no duty, the implied duties currently being paid by U.S. exports of proposed ITA expansion products to China would fall from \$557 million to around \$266 million.

^bFTA partner.

^cData may not sum to grand total due to rounding.

⁵ As discussed in chapter 1, some products on the draft list transmitted to the Commission from the USTR may already be covered by the original ITA, either wholly or in part. The trade and tariff savings discussed in this section focus only on those products representing a true expansion of product coverage. The term "proposed ITA expansion products" refers to those goods from USTR's list for proposed product coverage that are not currently covered by the agreement.

⁶ Average ad valorem equivalent tariff rates are estimated based on trade data.

⁷ Estimated duties are assumed to be zero for U.S. imports into FTA partner countries with the exception of those that entered into force in 2012 (Colombia, Korea, and Panama). However, in some cases duties may have been paid for goods not meeting certain FTA requirements (i.e. country-of-origin).

estimated average AVE tariffs ranged from zero to a high of 6.0 percent in India, which imposed the highest AVE rate among ITA members on U.S. exporters.⁸ Most of the remaining importing countries impose duties on imports of these products.⁹

In 2011, the largest share of estimated duties collected by ITA members on U.S. exports of proposed ITA expansion products were imposed by the EU and China (table 3.1). The EU was the largest destination for U.S. exports of proposed ITA expansion products (\$32.8 billion), and China imposed the highest AVE tariff rate of the ten leading U.S. export destinations for such products (3.9 percent).¹⁰ Among these ITA member countries that do not have an FTA with the United States, Japan (0.14 percent) and Malaysia (0.78 percent) imposed the lowest tariffs on U.S. exports of proposed ITA expansion goods. Despite these low tariffs, elimination of such tariffs in these two markets would still likely benefit U.S. exports because these countries are major trading partners as well as major producers and consumers of technology products.

The top five non-ITA markets for U.S. exports of proposed ITA expansion products in 2011 accounted for 80 percent (\$32 million) of the total of such exports to all non-ITA members (table 3.1). Two of these countries (Mexico and Chile) are FTA partners with the United States, so joining the ITA or expanding the list of included products would not significantly change the duties currently collected from U.S. exporters.¹¹ However, U.S. exporters of proposed ITA expansion products could benefit from increased market access in Brazil, Venezuela, and Argentina, the second-, third-, and fifth-largest destinations for such exports among non-ITA markets. U.S. exports to these three countries in 2011 were subject to a total of \$772 million in duties at average AVE tariff rates of between 8.47 and 12.20 percent. Because these tariff rates are relatively high, inclusion of countries such as Brazil, Venezuela, and Argentina in the ITA would likely benefit U.S. exporters of proposed ITA expansion products.

Some of the products on the USTR's proposed ITA product expansion list are manufactured outside of the United States as part of a supply chain for U.S.-headquartered firms, either by subsidiaries or under contract. These companies will likely benefit indirectly from tariff elimination in major markets and the expansion of global trade in these products. Industry representatives state that regardless of the production location, strengthening the global market for ICT products by expanding ITA product coverage will benefit U.S. ICT companies. According to industry representatives, increased revenues for domestic companies are also viewed as likely to lead to additional investment in research and development (R&D) and more hiring.¹² Because the innovation, design, intellectual property, and much of the addition of value of these

⁸ All estimates in this section use the entire value of the trade in the HS 6-digit subheadings referenced in the product list provided by USTR. Because trade in ex-outs represents only part of the trade in products classified under a given 6-digit subheading, the figures presented are likely to overstate trade and estimated duties for ex-outs.

⁹ The United States has FTAs with the following ITA member countries: Australia, Bahrain, Canada, Colombia, Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, Israel, Jordan, Korea, Morocco, Nicaragua, Oman, Panama, Peru, and Singapore.

¹⁰ However, actual duties collected by China are probably significantly lower because of special customs provisions. See table 3.1, footnote b.

¹¹ Under an FTA, the preferential duty-free rate is applied only on imports that meet certain country-of-origin and other requirements.

¹² Ezell, "Boosting Exports, Jobs, and Economic Growth," March 2012, 6–7.

products occurs in the United States, industry representatives maintain that expanding ITA product coverage would help create domestic jobs.¹³

Benefits to U.S. Industry from Lower-Cost Imports

U.S. importers are likely to benefit from eliminating tariffs and the resulting improvements in access and lower costs for ICT products. In 2011, the United States imported \$316.9 billion of proposed ITA expansion products from the world and imposed duties on imports from most countries other than U.S. FTA partners (table 3.2).¹⁴ The total estimated duties collected on these products amounted to \$2.7 billion in 2011, at an estimated average AVE rate of 0.87 percent. ITA members supplied 83 percent of U.S. imports of proposed ITA expansion products (\$261.6 billion), of which the 10 leading ITA member countries accounted for most of those imports (\$243.8 billion). U.S. imports faced a range of duties on these goods, depending primarily on the type of good supplied by each country.

TABLE 3.2 U.S. imports from leading markets, calculated duties, and average ad valorem equivalent tariff rates on proposed ITA expansion products by trading partner, 2011

Country	U.S. imports (million \$)	Calculated duties (million \$)	Average ad valorem equivalent (%)
ITA members total	261,603	2,654	1.01
China	91,395	1,301	1.42
EU	47,410	559	1.18
Japan	34,103	361	1.06
Canada ^a	15,220	23	0.15
Taiwan	12,289	102	0.83
Malaysia	11,636	43	0.37
Korea ^a	11,452	104	0.91
Costa Rica ^a	7,028	1	0.01
Thailand	6,642	43	0.64
Singapore ^a	6,633	8	0.13
Non-ITA members total	55,281	90	0.16
Mexico ^a	53,568	80	0.15
Brazil	749	5	0.69
South Africa	346	1	0.16
Russia	220	1	0.50
Pakistan	66	0	0.03
Grand total ^b	316,884	2,744	0.87

Sources: Official statistics from USDOC, WTO, and USITC calculations.

^aFTA partner.

^bData may not sum to grand total due to rounding.

¹³ CERC, written submission to the USITC, November 20, 2012, 2; CEA, written submission to the USITC, November 20, 2012, 1; USITC, hearing transcript, November 8, 2012, 15 (testimony of Sage Chandler, CEA), 25 (testimony of Stephen Ezell, ITIF), and 33, 37 (testimony of John Neuffer, ITI).

¹⁴ In some cases duties may have been paid for goods not meeting certain FTA requirements (i.e. country-of-origin).

Retail organizations have expressed support for ITA product expansion, indicating that cheaper imports benefit both retailers and their consumers. According to industry representatives, lower costs for imports of ICT products improve access to that technology, which is used throughout the economy to facilitate education, enable entrepreneurs, and generally increase business efficiency.¹⁵ The Information Technology Industry Council (ITI) has estimated that 80 percent of the value of technology comes from its use and diffusion, while 20 percent of benefits come from production.¹⁶

Supply Chain Benefits in the ITA

ICT goods are usually produced in a geographically dispersed manner, in which parts and components are produced in many countries, assembled into larger sub-units, and then turned into final goods that are shipped to the consumer. This method of production, known variously as “production fragmentation,” “global value (supply) chains,” or “trade in tasks,” has revolutionized the market for ICT goods in recent decades.¹⁷ For example, a computer disk drive assembled in Thailand may contain components originating in 11 customs territories.¹⁸ A recent Commission investigation into the development of global supply chains has also shown that innovative U.S. multinational firms derive significant income from goods whose supply networks they coordinate, regardless of the location of various stages of the production process.¹⁹

The impact of tariffs on fragmented production processes is generally greater than, and qualitatively different from, the impact of tariffs on simple production processes. Because each product crosses borders multiple times, tariffs charged on sub-components are incorporated into the costs of components, which may be subject to an additional duty when shipped to a final destination. Thus the effect of tariffs may be compounded and magnified at every stage of the production process.²⁰

While improvements in global logistics and changes in management practices have contributed to the emergence of global value chains in ICT goods, global trade patterns also reflect the important role played by the ITA since its beginning in 1997.²¹ Estimates by the Organisation for Economic Co-operation and Development (OECD) indicate that the participation of ITA members in global value chains has exceeded that of non-ITA members by a large margin. In 2008, nearly 8 percent of gross exports of ITA members participated in global value chains for ICT products, compared to 2 percent for non-ITA members.²² Elimination of duties for products under the proposed ITA expansion would likely spur increased trade within global value chains.

¹⁵ CEA, written submission to the USITC, November 20, 2012, 5; Best Buy, written submission to the USITC, November 20, 2012, 1.

¹⁶ ITI, written submission to the USITC, November 20, 2012, 9.

¹⁷ See USITC, “Import Restraints: Global Supply Chains,” for a discussion of this phenomenon.

¹⁸ Baldwin, “Managing the Noodle Bowl: The Fragility of East Asian Regionalism.”

¹⁹ USITC, *The Economic Effects of Significant U.S. Import Restraints*, 2011, 3-24.

²⁰ See Yi, “Can Vertical Specialization Explain the Growth” 2010, for a microeconomic analysis of this phenomenon, and Ferrantino, “Using Supply Chain Analysis,” 2012, for a simplified example.

²¹ Anderson and Mohs, “The Information Technology Agreement,” 2011.

²² Miroudot and Rouzet, “Trade Policy Implications of Global Value Chains,” 2012.

Market Access Opportunities: Key Selected Subsectors

This section provides an overview of selected subsectors that could benefit from increased market access opportunities under a potential expansion of ITA product coverage. The five subsectors—MCOs, medical devices, relay and industrial control equipment, optical media, and loudspeakers and headsets—were selected from the proposed list of products for ITA expansion based on the value of U.S. exports of the products, the level of tariffs, and available industry information.²³

Extending ITA product coverage to include these five subsectors would likely increase U.S. export opportunities to ITA member countries that are already leading destinations for such exports, especially in cases where the importing country imposes moderate to high tariffs on these goods. Opportunities to increase exports also exist in other ITA markets with relatively high tariffs, where current U.S. exports are limited but growing. Liberalization of tariffs on these products in several non-ITA member countries, especially in South America, could provide additional market access opportunities for U.S. exports.

Table 3.3 summarizes the trade and potential duty savings on U.S. exports in these subsectors. Of the products proposed for ITA expansion, U.S. exports of medical devices in 2011 represented the largest total (\$17.8 billion) of all selected subsectors, and thus generated the highest estimated duties (table 3.3). Eliminating tariffs on these products would create estimated duty savings of \$229 million, even though the AVE tariff rate was lower than the average across all proposed ITA expansion products. A share of the tariff savings for each of the subsectors would accrue to the exporter, and if some of these savings were passed on to the importer, could increase demand for these products.²⁴

TABLE 3.3 U.S. exports, estimated duties, and average ad valorem equivalent tariff rates on selected subsectors composed of proposed products for ITA expansion, 2011

Products ^a	U.S. exports (million \$)	Estimated duties (million \$)	Ad valorem equivalent (%)
Medical devices	17,803	229	1.29
Relay and industrial control equipment	6,559	125	1.92
Optical media	2,726	36	1.30
Loudspeakers and headsets	1,429	39	2.72
Other	151,043	2,885	1.91
Total (all products) ^d	179,560	3,314	1.85

Sources: Official statistics from the USDOC, WTO, and USITC calculations.

^aMCOs can be classified under a wide range of HS subheadings, depending upon the end product that such MCOs are used in. As a result, any list of HS codes would be speculative and likely to result in an overstatement of U.S. export data.

^bData may not sum to grand total due to rounding.

²³ As some of the products contained in the 6-digit HS subheadings on the list transmitted to the Commission from the USTR are already covered wholly or in part by the existing agreement (and thus already receive duty-free treatment), the selected subsector discussions focus on products that represent new areas of coverage under an expanded ITA. In selecting the subsectors to discuss, consideration was given to the volume of trade, including the volume of trade for a particular ex-out, which could not always be estimated with precision. The subsectors presented are illustrative of market access opportunities that could accrue to U.S. exporters if tariffs are eliminated.

²⁴ The division of tariff savings between the exporter and importer depends on the elasticity of export supply and import demand with respect to price (i.e., the division depends on how sensitive export supply and import demand are to price changes).

Multi-component Integrated Circuits (MCOs)

Overview

MCOs were included in attachment B of the proposed product expansion list provided by the USTR. Such products are to be covered by the agreement “wherever they are classified in the HS,” and MCOs fall under the “parts” categories of multiple HS subheadings, often grouped with other parts and components of end products. As a result, industry-specific tariff and trade data are mostly unavailable, and the following discussion of MCOs relies largely on anecdotal information and estimates.

The United States is a leading producer and exporter of MCOs. These products are made by semiconductor producers, and in 2011, U.S. semiconductor producers had global sales of \$152 billion, representing over one-half of the global semiconductor market. MCOs reportedly account for between 1.5 and 3 percent of the global semiconductor market.²⁵ U.S. exports of MCOs face a range of tariffs in markets around the world. Leading U.S. export markets for MCOs likely mirror those of traditional semiconductor exports and include China, Malaysia, Taiwan, and Korea. The U.S. semiconductor industry supports including MCOs in the ITA because U.S. semiconductor companies not only export MCOs but also design and market MCOs that they produce offshore. Therefore, in the industry’s view, they would benefit from duty-free access for both U.S. exports and for trade between third-country markets, lowering the cost of MCOs and increasing U.S. competitiveness.²⁶

Product description and scope

MCOs are custom-designed semiconductors that are combined with other semiconductor devices and/or silicon-based sensors (box 3.1).²⁷ The semiconductor industry considers MCOs a new, innovative type of semiconductor, and therefore a subset of semiconductors.²⁸

²⁵ USITC, hearing transcript, November 8, 2012, 39, 41 (testimony of Ian Steff, Semiconductor Industry Association).

²⁶ *Ibid.*, 108–109.

²⁷ The term MCO is used by governments and trade associations for discussing international trade for this category of custom-manufactured semiconductors. Industry product types that would likely include MCOs are system-on-a-chip (SoC), package-on-package (PoP), and system-in-package (SiP).

²⁸ MCOs have been in production for the past several years, but an agreement on a definition was only reached in September 2012 by five members (the United States, the EU, Japan, Korea, and Taiwan) of the Government/Authorities Meeting on Semiconductors (GAMS) with no agreement by the sixth member (China). This GAMS definition also has the support of all regional semiconductor industry associations. European Commission, “Government/Authorities Meeting on Semiconductors,” 2012.

GAMS was formed in June 1999, when the United States, Japan, Korea, and the European Commission announced a multilateral Joint Statement on Semiconductors designed to ensure fair and open global trade in semiconductors. Taiwan and China subsequently joined GAMS. U.S. Trade Representative, “Semiconductors,” n.d.

BOX 3.1 MCOs definition

The Government/Authorities Meeting on Semiconductors (GAMS) defines MCOs as follows:

Multi-component integrated circuits (MCOs) are a combination of one or more monolithic, hybrid, and/or multi-chip integrated circuits with at least one of the following components: silicon-based sensors, actuators, oscillators, resonators and/or combinations thereof, and/or components performing the functions of articles classifiable under heading 8532 [capacitors], 8533 [resistors], 8541 [diodes, transistors, thyristors, photosensitive semiconductor devices, and mounted piezoelectric crystals], and/or inductors classifiable under heading 8504, formed to all intents and purposes indivisibly into a single body like an integrated circuit, as a component of a kind used for assembly onto a printed circuit board (PCB) or other carrier, through the connecting of pins, leads, balls, lands, bumps, or pads.

For the purpose of this definition the following expressions mean:

1. "Components" may be discrete, manufactured independently then assembled onto the rest of the MCO, or integrated into other components.
2. "Silicon based" means built on a silicon substrate, or made of silicon materials, or manufactured onto integrated circuit die.
- 3(a). "Silicon based sensors" consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantities and transducing these into electric signals, caused by resulting variations in electric properties or displacement of a mechanical structure.

"Physical or chemical quantities" relates to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration, etc.
- 3(b). "Silicon based actuators" consist of microelectronic and mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of converting electrical signals into physical movement.
- 3(c). "Silicon based resonators" are components that consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures in response to an external input.
- 3(d). "Silicon based oscillators" are active components that consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.

Source: SIA, written submission to the USITC, November 20, 2012, 10.

Note: Bracketed text added for clarity by USITC.

However, finished MCOs frequently fall outside of the World Customs Organization (WCO) definition of semiconductors.²⁹ As noted in the definition in box 3.1, some parts of MCOs are semiconductors.³⁰ Thus, MCOs are classified as parts of the products into which they are subsequently incorporated, and therefore are subject to import duties,

²⁹ SIA, written submission to the USITC, November 20, 2012, 7.

³⁰ The monolithic, hybrid, and/or multi-chip integrated circuits referred to in the MCO definition are types of semiconductors described by the WCO in its definition of semiconductors for international trade product classification under HS 8542. Multi-chip integrated circuits (MCPs), also included in Attachment B, were added to HS 8542 by the WCO in 2007, and were not part of the original ITA, so some countries may not give duty-free treatment to these products. Parts of MCPs classified within HS 8542.90 are excluded from the ITA. WCO, *Explanatory Notes*, 5, 2012, XVI-8542-1 to XVI-8542-4.

whereas semiconductors are already duty free under the ITA.³¹ MCOs are used in a variety of products, including smartphones, tablets, medical devices, household appliances, and motor vehicle parts such as braking, steering, and air bag systems. Some common examples of the ways MCOs are classified in the HS are:³²

<u>Parts of product</u>	<u>HS subheading</u>
Refrigerators	8418.99
Dishwashers	8422.90
Vending machines	8476.90
Vacuum cleaners	8508.70
Smartphones	8517.12
Gaming consoles	9504.10
Medical devices	9018.11–20

MCOs are used in many different products to provide increased functionality, while at the same time reducing energy consumption and the total number of components. For example, using MCOs on a printed circuit assembly (a printed circuit board that is populated with semiconductors and related devices) would make it possible to build the circuit board smaller and with fewer components and connections. Thus, the number of steps needed to manufacture the printed circuit board would also be reduced.

U.S. industry

The United States is the world’s leading producer of MCOs.³³ Data for semiconductors that are MCOs are not collected by the industry or government entities, in part because an industry definition of MCOs was agreed upon only recently (box 3.1). However, it is estimated that in 2011, sales of MCOs accounted for between 1.5 and 3.0 percent of global semiconductor sales, or an estimated \$1.2 to \$2.4 billion.³⁴ While employment estimates are not available for domestically produced MCOs, in 2011, total U.S. semiconductor manufacturing employment at all locations totaled 188,358 workers; if semiconductor producers that design but do not have production facilities in the United States (“fabless” producers) are included, employment is estimated at 244,800 workers.³⁵ Major U.S. semiconductor companies producing MCOs in the United States include Intel Corp.; Texas Instruments, Inc.; Freescale, Ltd.; ON Semiconductor Corp.; and Analog Devices, Inc.; U.S. fabless semiconductor producers of MCOs include Qualcomm, Inc.; Broadcom Corp.; and Cypress Semiconductor Corp.

In producing MCOs, circuit designs called dies are etched on wafers that are subsequently assembled with other semiconductors or components, packaged, and tested. As indicated above, many U.S. semiconductor industry firms perform all these steps in

³¹ SIA, written submission to the USITC, November 20, 2012, 7.

³² SIA, written submission to the USITC, November 20, 2012, 7–8; Intel Corp., written submission to the USITC (in investigation no. 332-532), September 6, 2012, 2.

³³ USITC, hearing transcript, November 8, 2012, 91 (testimony of Ian Steff, Semiconductor Industry Association).

³⁴ *Ibid.*, 39, 41.

U.S. product shipments for North American Industry Classification System (NAICS) industry number 334413—Semiconductor and Related Device Manufacturing— totaled \$80.8 billion in 2011 and \$73.4 billion in 2010. U.S. Bureau of the Census, *Annual Survey of Manufactures*, 2011.

http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ASM_2011_31VS101&prodType=table (accessed December 10, 2012). Data exclude miscellaneous receipts—receipts other than for manufacturing of the product, such as training and so forth. Within this product grouping, 2011 U.S. shipments of transistors totaled \$675,785, and U.S. shipments of diodes and rectifiers totaled \$379,127.

³⁵ SIA, “U.S. Semiconductor Industry Employment,” November 2012.

the United States. “Fabless” U.S. producers, however, contract for the offshore manufacture of the wafers with dies, as well as the assembly, packaging, and testing operations, principally in China, Malaysia, Singapore, and Taiwan. Some other companies produce wafers with dies in the United States and export them for assembly, packaging, and testing offshore. In all instances, significant U.S. value is added to these MCOs through research, design, and marketing.

Benefits to the U.S. Industry of ITA Expansion

Growth in production of MCOs is driven by “consumer demand for increased performance, ultra miniaturization, energy efficiency, and cost saving.”³⁶ Demand for MCOs will likely continue to rise as sales of semiconductors grow. According to one forecast, total integrated circuits sales are projected to grow by 7.4 percent annually during 2011–16, with communications, automotive, and medical/industrial applications driving this growth.³⁷ Large export markets for semiconductors are also producers and consumers of ICT products that incorporate MCOs, including consumer goods, motor vehicles, and medical devices. Thus, expanding ITA coverage to include MCOs would benefit a wide range of countries and industries.

Export opportunities

U.S. exporters of MCOs will likely benefit from the elimination of foreign import duties, a unified customs treatment of MCOs, and greater trade policy certainty as a result of expanding the ITA to include MCOs.³⁸ It is estimated that if the ITA product list had been expanded to include MCOs by 2011, global duty savings that year would have been \$94 million–\$188 million.³⁹ These duty savings would likely be greater in the future as the consumption of MCOs increases. The greatest U.S. export opportunities for MCOs are likely the major markets for U.S. exports of semiconductors: China, Malaysia, Taiwan, Korea, and the EU, all of which are ITA members.⁴⁰ For 2011, SIA estimated that the average tariff rate for MCOs imported into China was 6.2 percent, with a rate as high as 15 percent; Taiwan, 2.9 percent; Korea, 6.0 percent;⁴¹ and the EU, 2.5 percent.⁴² Data for Malaysia are not readily available. For other ITA member countries that are major U.S. export markets for semiconductors—Japan, Singapore, and Hong Kong—tariff rates are zero. Non-ITA countries that represent export opportunities, since they are

³⁶ SIA, written submission to the USITC, November 20, 2012, 8.

³⁷ This represents a compound annual growth rate. SolidStateTechnology, “Comm, Auto Apps,” October 26, 2012.

³⁸ Duty savings are important for U.S. producers as duties can increasingly reduce the profitability of semiconductors, and hence MCOs, over time. The reason is that as the volume of production rises and prices fall, duties may constitute a larger percentage of the total price. Intel Corp., written submission to the USITC, September 6, 2012, 2.

³⁹ This estimate is from the SIA and is based upon a list of 70 HS 6-digit subheadings and imports into select countries. SIA, written submission to the USITC, November 20, 2012, 6, 12. Analysis of this list indicates that 22 subheadings have products that are included under the ITA, and another 27 subheadings are on the proposed list of products to be considered for expansion of the ITA. The remaining 21 subheadings in SIA’s list currently are not being considered for inclusion in the expansion of the ITA.

⁴⁰ USITC, hearing transcript, November 8, 2012, 91–92 (testimony of Ian Steff, Semiconductor Industry Association).

⁴¹ The Korean tariff rate is from 2011. When the U.S. FTA with Korea entered into force in March 2012, tariffs on many products containing MCOs were eliminated immediately. However, some tariffs on products containing MCOs will be reduced to zero over a period of 3 years, while other tariffs will be reduced to zero over a period of 10 years. Some U.S. exports of MCOs to Korea will continue to be subject to tariffs on a small number of products that were not included in the FTA.

⁴² USITC, hearing transcript, November 8, 2012, 92, 113 (testimony of Ian Steff, Semiconductor Industry Association).

major importers of semiconductors and thus likely importers of MCOs, are Mexico and Brazil. U.S. exports of MCOs to Mexico are eligible for duty-free treatment under the North American Free Trade Agreement (NAFTA), and therefore the duty rates are likely to be zero. Data for Brazil are not readily available.

If MCOs were included in the ITA, U.S.-produced goods using imported MCOs would be more competitively priced, both for domestic consumption and export, owing to lower input costs. The semiconductor industry has estimated the average tariff applied to U.S. imports of MCOs at approximately 1.62 percent.⁴³ However, a number of U.S. tariff lines under which MCOs are classified already have a duty rate of zero. Globally, tariff elimination on MCOs in the ITA would result in lower input costs for the production of all ICT products, as well as, for example, motor vehicles and medical devices, resulting in lower-priced products.

Further, duty-free access provided under the ITA for MCOs would also likely benefit U.S. fabless producers of MCOs that rely on offshore production. Although the MCOs may have a country of origin other than the United States, they have significant U.S. content and intellectual property. Duty-free access for MCOs under the ITA would allow increased market access between third countries and allow these U.S. fabless MCO producers to be price-competitive globally, and thus maintain strong MCO research and design capabilities in the United States.⁴⁴

Medical Devices

Overview

The United States is a global leader in the production and export of medical devices. In 2011, total subsector exports amounted to \$17.8 billion. The primary market for U.S. exports of these devices was the EU, of which Germany and the Netherlands were the principal export destinations. Other leading markets were Japan, China, and Canada. While U.S. exports of these products enter several leading ITA member markets duty free, other ITA members impose duties ranging from 5 to 8 percent for the products in this subsector. U.S. industry representatives support the inclusion of these medical devices in the ITA product coverage in order to boost competitiveness and increase market access opportunities.⁴⁵

Product description and scope

Of the medical devices under consideration for addition to the ITA, many products are imaging equipment classified under HS headings 9018 and 9022.⁴⁶ The list of devices included in this analysis includes diagnostic ultrasound, magnetic resonance imaging (MRI), scintigraphic apparatus, computed tomography (CT), and x-ray technology. Each of these devices employs ICT (such as high-frequency radio waves or sound waves) to

⁴³ USITC, hearing transcript, November 8, 2012, 73 (testimony of Ian Steff, Semiconductor Industry Association).

⁴⁴ *Ibid.*, 108–109.

⁴⁵ NEMA, written submission to the USITC, September 6, 2012; Stryker Corporation, written submission to the USITC, September 6, 2012; industry representative, interview by USITC staff, November 28, 2012, Washington, DC.

⁴⁶ These products include the following HS subheadings: 9018.11, 9018.12, 9018.13, 9018.14, 9018.19, 9018.20, 9018.49, 9018.50, 9018.90, 9022.12, 9022.13, 9022.14, 9022.19, 9022.21, 9022.29, 9022.30, 9022.90. The relevant NAICS codes are 334510 and 334517.

transmit digital images of the body onto computer screens, which facilitates diagnosis and medical treatment.

U.S. industry

The United States is the world's largest medical device manufacturer. Many of the world's largest companies are headquartered domestically, including Abbot Laboratories, Baxter, Cardinal Health, GE Healthcare, Johnson & Johnson, Medtronic, and Stryker Corporation.⁴⁷ In 2011, domestic shipments totaled \$30 billion, and the domestic industry employed nearly 75,000 workers.⁴⁸ Due to the technically advanced nature of these devices, the sector relies on a highly skilled workforce and pays an average salary of approximately \$70,000—49 percent more than the average private sector job and 18 percent higher than the average manufacturing job.⁴⁹

Benefits to the U.S. Industry of ITA Expansion

Increasing global demand for medical devices is driven by aging populations, the growing incidence of lifestyle-related health problems, and increasing public spending directed towards the healthcare sector. For example, China's healthcare expenditures are forecast to grow annually by nearly 15 percent over the next five years, with much of this funding being directed towards expanding resources to the rural healthcare sector.⁵⁰ China was the United States' second-largest export market in 2011, representing 7 percent (\$1.3 billion) of total U.S. medical device exports. The removal of duties under ITA tariff liberalization would likely result in increased U.S. exports to China and other leading markets that currently maintain duties, as discussed below.

Export opportunities

U.S. exports of most medical devices currently receive duty-free treatment in leading ITA member markets, especially the EU, and it is likely that these markets will continue to represent significant export opportunities for U.S. firms if these products are added to the ITA product coverage (table 3.4). Other ITA markets—China, Korea, and India—likely represent the greatest opportunities for increased market access, as they maintain the highest duties on medical devices (ranging up to 7 percent, 8 percent, and 7.5 percent, respectively) among ITA members who are also leading export markets for the United States.⁵¹ Although Brazil is not an ITA member, it was the United States' tenth-largest export market for medical devices in 2011 and maintains duties as high as 16 percent for certain products, representing another export opportunity for U.S. producers of medical equipment.⁵²

⁴⁷ At least 5 of the world's top 10 medical device manufacturers in 2011 were both leading manufacturers of imaging devices and headquartered in the United States. MPO, "The Top 30," July/August 2012.

⁴⁸ U.S. Census Bureau, Annual Survey of Manufactures, (accessed December 20, 2012); Commission estimates based on U.S. Census Bureau's 2011 Annual Survey of Manufactures, (accessed December 13, 2012).

⁴⁹ MPO, "Lawmaker Proposes Repealing Controversial Device Tax," May 2010.

⁵⁰ EIU, "China: Healthcare and Pharmaceuticals Report," December 1, 2012.

⁵¹ The Korean tariff rate is from 2011. The U.S. FTA with Korea entered into force in March 2012, at which time the rate of duty on some U.S. exports of medical devices to Korea was reduced to zero immediately and tariffs on several other products will be reduced to zero over the next 2 years. However, tariffs on most U.S. exports of medical devices to Korea will be reduced to zero over a period of 10 years.

⁵² In one example, Brazil maintained an average ad valorem duty on electrocardiograph devices of 14 percent in 2011. WTO, Integrated Database notifications (accessed November 28, 2012).

TABLE 3.4 U.S. exports of medical devices, major U.S. markets, and corresponding MFN tariff rates, 2011

HS code	Product description	Leading U.S. export markets ^a	U.S. exports (\$ million)	MFN tariff (percent ad valorem)
9018.11	Electrocardiographs and parts	<i>Canada, Germany, Japan, Korea, UK</i>	129	<i>Korea 8.0^b</i>
9018.12	Ultrasonic scanning apparatus	<i>China, Japan, Germany, Australia, Canada</i>	878	<i>China 5.0–7.0^b</i>
9018.13	Magnetic resonance imaging apparatus	<i>Netherlands, Japan, China, France, Germany</i>	568	<i>China 4.0^b</i>
9018.14	Scintigraphic apparatus	<i>China, Netherlands, Germany, France, Korea</i>	77	<i>China 5.0^b</i>
9018.19	Electrodiagnostic apparatus, parts and accessories NESOI ^c	<i>Germany, Netherlands, Japan, China, Belgium</i>	3,021	<i>China 4.0^b</i>
9018.20	UV or Infrared apparatus and parts	<i>Netherlands, Japan, Canada, Hong Kong, China</i>	78	<i>China 4.0^b</i>
9018.49	Dental instruments and appliances	<i>Canada, Germany, Italy, Japan, Australia</i>	411	0
9018.50	Ophthalmic instruments and appliances	<i>Japan, Germany, Canada, France, Netherlands</i>	917	0
9018.90	Medical instruments NESOI	<i>Japan, Mexico, Netherlands, Canada, Germany</i>	8,044	<i>Mexico 0–15.0^b</i>
9022.12	Computed tomography apparatus	<i>China, Japan, France, Brazil, Canada</i>	804	<i>China 4.0^b</i>
9022.13	Apparatus base for x-rays	<i>Germany, Canada, Japan, Australia, Brazil</i>	70	<i>Brazil 0–14.0^b</i>
9022.14	X-rays, NESOI	<i>China, Belgium, Japan, Canada, Germany</i>	773	<i>China 4.0^b</i>
9022.19	X-rays, NESOI	<i>UK, Japan, Germany, Mexico, China</i>	423	<i>China 4.0^b</i>
9022.21	Medical radiation apparatus	<i>France, Russia, Belgium, China, Japan</i>	90	<i>Russia 5.0, China 4.0^b</i>
9022.29	Non-medical radiation apparatus	<i>Mexico, Canada, China, Japan, India</i>	50	<i>China 6.0, India 7.5</i>
9022.30	X-ray tubes	<i>Japan, France, China, Netherlands, Singapore</i>	421	<i>France 2.1, China 2.0, Netherlands 2.1^b</i>
9022.90	X-ray generators	<i>Germany, Japan, China, France, Canada</i>	1,051	<i>Germany 2.1, China 6.0, France 2.1^b</i>
Total			17,803	

Sources: Official statistics from the USDOC and WTO.

Note: Countries in italics are ITA members.

^aThe EU is the principal export market for medical imaging equipment produced in the United States, representing 6 of the 10 largest markets for U.S. exports.

^bAll others listed as leading U.S. export markets are 0.

^cNot elsewhere specified or included.

^dData may not sum to grand total due to rounding.

Tariff elimination for the medical devices classified under HS headings 9018 and 9022 would likely provide greater competitive access to key markets for U.S. exports of these goods when competing against non-ITA suppliers.⁵³ Another benefit of extending ITA product coverage would be to lower operating costs for many U.S. manufacturers of medical devices that would allow such firms to increase production of these devices in both domestic and foreign locations.⁵⁴

⁵³ Industry representative, interview by USITC staff, November 28, 2012, Washington, DC; NEMA, written submission to the USITC, September 6, 2012; Stryker Corporation, written submission to the USITC, September 6, 2012.

⁵⁴ Stryker Corporation, written submission to the USITC, September 6, 2012.

Relay and Industrial Control Equipment

Overview

The United States is among the top five global producers and exporters of relay and industrial control products. The value of U.S. exports amounted to about \$6.6 billion in 2011.⁵⁵ The leading U.S. export markets were Mexico, Canada, the EU (Germany, UK), China, and Hong Kong.⁵⁶ Average tariffs in these major markets ranged from zero to 18 percent. U.S. industry representatives expressed broad support for incorporating the products covered in this industry subsector into the ITA product coverage.⁵⁷

Product description and scope

The relay and industrial control industry subsector, as defined by the North American Industry Classification System (NAICS),⁵⁸ consists of establishments primarily engaged in manufacturing relays, motor starters and controllers, and other controls and control accessories used for industrial purposes. With the exception of two Harmonized Tariff Schedule (HTS) statistical reporting numbers,⁵⁹ the entire subsector is included on USTR's proposed ITA product expansion list.⁶⁰ Of the specific products covered in this industry subsector, the two largest export articles in terms of value in 2011 were programmable controllers (classified under HTS statistical reporting number 8537.10.9060), also known in the industry as programmable logic controllers or PLCs, and motor control centers (HTS statistical reporting number 8537.10.6000), also known as MCCs. That year, PLCs accounted for \$481.8 million in exports (10 percent of total subsector exports) and MCCs for \$195.2 million (4 percent).⁶¹

⁵⁵ The \$6.6 billion figure is based on exports at the HS 6-digit level, as given in the USTR's list of proposed products for ITA expansion. At the NAICS subsector level for relay and industrial control equipment, the value of U.S. domestic exports is \$4.6 billion. The HS 6-digit data level overestimates U.S. exports of relay and industrial control equipment because it includes HS 10-digit Schedule B articles that are not covered in the NAICS relay and industrial control equipment category. The NAICS relay and industrial control equipment category was used for the remainder of this subsector write-up to provide context for this U.S. industry's products that are being considered for the proposed ITA product expansion.

⁵⁶ Mexico, Canada, the EU, China, and Hong Kong are the leading export markets at the HS 6-digit data level. At the NAICS relay and industrial control equipment subsector data level, the leading markets are Mexico, the EU, Canada, China, and Brazil; for this subsector, Hong Kong was the seventh-largest export market in 2011.

⁵⁷ NEMA, written submission to the USITC, September 6, 2012; NEMA, written submission to the USITC, November 26, 2012.

⁵⁸ Relay and industrial control products are contained in NAICS 335314.

⁵⁹ HTS statistical reporting numbers are based on the United States Harmonized Tariff Schedule. HTS statistical reporting numbers excluded from the proposed product expansion list from USTR are 8533.40.0040 (other variable resistors including rheostats and potentiometers) and 9107.00.0000 (time switches with clock or watch movement or with synchronous motor). Together these products accounted for \$28.6 million (0.6 percent) of U.S. subsector exports in 2011.

⁶⁰ HTS statistical reporting numbers comprising this industry subsector and included on USTR's list are: 8536.41.0020, 8536.41.0030, 8536.41.0045, 8536.41.0050, 8536.41.0060, 8536.49.0050, 8536.49.0055, 8536.49.0065, 8536.49.0075, 8536.49.0080, 8536.50.4000, 8536.50.8055, 8536.50.9055, 8537.10.6000, 8537.10.9030, 8537.10.9060, 8537.10.9070, 8537.10.9090, 8538.90.7080, and 8538.90.8080.

⁶¹ The two largest HTS product exports in 2011 were both basket categories for which specific products could not be identified. Together they accounted for \$3.2 billion (69 percent) of total U.S. subsector exports. These basket categories were other bases equipped with two or more apparatus of HTS headings 8535 or 8536 for electric control or the distribution of electricity, classified under 8537.10.9090 (\$1.4 billion) and other parts suitable for use solely or principally with the apparatus of HTS heading 8535, 8536, or 8537, classified under 8538.90.7080 (\$1.8 billion). The National Electrical Manufacturers Association (NEMA) expressed support for including these parts in the ITA. NEMA, written submission to the USITC, September 6, 2012, 7.

PLCs are durable industrial data processing machines capable of automatically executing and/or modifying the execution of electromechanical processes based on programmed operating parameters specified by the user and network connectivity.⁶² MCCs are an assembly of a common power bus, motor control units, and, more recently, contain PLCs.⁶³ MCCs govern the performance of an electric motor by applying information technology in a programmed manner to control electricity and mechanical movements in an environment (such as a factory assembly line) where processes must be monitored and adapted to accommodate changing operating conditions.⁶⁴ Both products have a wide array of industrial applications including specific information technology uses for semiconductor testing.⁶⁵

U.S. industry

The United States is believed to be among the world's five leading producers of relay and industrial control products, including both PLCs and MCCs. Major U.S. producers include GE, Reliant Controls Corp., and Rockwell Automation. Approximately 1,096 establishments manufacture relay and industrial controls in the United States, of which almost 1,000 were reported to be small- or medium-sized enterprises.⁶⁶ In 2011, there were an estimated 18,090 production workers and \$9.3 billion in domestic shipments for this industry.⁶⁷

Many U.S. firms manufacture PLCs and MCCs both domestically and off-shore.⁶⁸ These products are used in virtually all automated manufacturing industries, including automotive factories, food processing plants, petrochemical refineries, and municipal water treatment facilities.⁶⁹ In addition, they are important in the manufacturing of computers, communications, and networking products, and are an integral part of testing and debugging integrated circuits during development.⁷⁰

Benefits to the U.S. Industry of ITA Expansion

Continued global investments in infrastructure, oil exploration, power generation, and mining and commodity processing have stimulated growth in demand for PLCs and MCCs despite the economic downturn in many industrial markets.⁷¹ Emerging economies such as Argentina, Brazil, Chile, and Venezuela have been among the fastest-growing markets for these products, and there is some suggestion that continued demand will be driven by foreign direct investments in the emerging economies.⁷² Adding PLCs and MCCs to the ITA product coverage would encourage additional demand for these

⁶² PLCs are designed to withstand extended temperature ranges, electrical interference, and vibration. NEMA, written submission to the USITC, September 6, 2012, 6.

⁶³ Rockwell Automation, written submission to the USTR, June 13, 2011, 2.

⁶⁴ NEMA, written submission to the USITC, September 6, 2012, 6–7.

⁶⁵ USITC, *The Information Technology Agreement: Part 1*, 2012, 2-31.

⁶⁶ U.S. Bureau of Census' 2007 Economic Census of Manufactures, the latest year for which data are available for the number of subsector establishments. Small establishments were defined as having 1–19 employees; medium ones 20–99; and large ones, 100 employees or more.

⁶⁷ U.S. Bureau of Census, Annual Survey of Manufactures, General Statistics, Statistics for Industry Groups and Industries for each year during 2007–2011, (accessed December 5, 2012).

⁶⁸ Industry representative, telephone interview with USITC staff, December 3, 2012; industry representative, email communication to USITC staff, December 21, 2012.

⁶⁹ NEMA, written submission to the USITC, September 6, 2012.

⁷⁰ Intel Corporation, written submission to the USITC, September 6, 2012.

⁷¹ Rockwell Automation, *Integrated, Intelligent Motor Control Centers*, December 2000, 19–24; Susan Perkins, "Aging Infrastructure and Energy," June 19, 2012.

⁷² Business Wire, "Research and Markets: Global Programmable Logic Controller," May 16, 2011.

products among ITA member countries, as well as possible new members, particularly in markets with relatively high tariff rates.

Export opportunities

Inclusion of PLCs in the ITA could increase U.S. exports among ITA member countries that are also leading markets, even if the tariff rate is relatively low. For example, the EU was the largest U.S. export market for PLCs in 2011 and imposed a duty of 2 percent (table 3.5). Other ITA members with relatively high tariff rates, particularly China—whose duties range from 5.0 to 8.4 percent—represent additional opportunities for increased U.S. exports of PLCs. U.S. exports to other major markets, Mexico and Canada, likely benefited from duty-free treatment under the NAFTA, though Mexico is not a party to the ITA. Adding South American countries as signatories to the agreement would likely result in another gain for U.S. exporters of PLCs, as Brazil and Argentina have the highest tariff rates (ranging from 2 to 18 percent for both countries) among the top 20 U.S. export markets for PLCs.⁷³

Similarly, the EU and China represent opportunities for increased U.S. exports if the ITA is expanded to cover MCCs, as they are both leading markets for such exports with moderate to high tariff rates (table 3.5). Korea, a leading ITA market, offers another opportunity for increased U.S. exports of MCCs. Between 2007 and 2011, U.S. exports of MCCs to Korea increased by \$11.3 million (413 percent) despite an 8 percent tariff rate.⁷⁴ As is the case with PLCs, certain South American countries—Brazil, Chile, and Venezuela—have the highest ad valorem tariff rates for MCCs among U.S. export markets, at 12.4 percent, 6 percent, and 15 percent, respectively. Although these countries are each comparatively small U.S. export markets, U.S. shipments to these countries combined more than doubled between 2007 and 2011, to \$12.1 million. Like U.S. exports of PLCs, U.S. exports of MCCs to Canada and Mexico likely benefited from duty-free treatment under the NAFTA, and they will likely continue to grow.

⁷³ U.S. exports to both Brazil and Argentina nearly tripled during 2007–2011, with U.S. exports to Brazil in 2011 valued at \$35.9 million and those to Argentina at \$6 million.

⁷⁴ The Korean tariff rate is from 2011. The U.S. FTA with Korea entered into force in March 2012, at which time the rate of duty on U.S. exports of MCCs to Korea was reduced to zero immediately.

TABLE 3.5 U.S. exports of certain relay and industrial control equipment, major U.S. markets, and corresponding MFN tariff rates, 2011

HTS code	Product description	Leading U.S. export markets	U.S. exports (\$1,000)	MFN tariff (percent ad valorem) ^a
8537.10.9060	PLCs	<i>EU</i> ^b	146,480	2.1
		<i>China</i>	54,584	5.0–8.4
		Brazil	35,938	2.0–18.0
		Mexico	33,558	0–15.0
		<i>Canada</i>	33,127	0–2.0
		All other	178,021	
		Total	481,753	
8537.10.6000	MCCs	<i>Canada</i>	61,558	0–2.0
		Mexico	30,312	0–15.0
		<i>EU</i> ^c	14,716	2.1
		<i>Korea</i>	13,995	8.0
		<i>China</i>	10,529	5.0–8.4
		All other	64,129	
		Total	195,239	

Sources: Official statistics from the USDOC and WTO.

Note: Countries in italics are ITA members.

^aAd valorem tariffs are reported for the 6-digit HS subheading.

^bAmong EU members, the largest markets for U.S. exports of PLCs in 2011 were Germany and the UK.

^cAmong EU members, the largest markets for U.S. exports of MCCs in 2011 were the UK and Germany.

Many industry representatives support reciprocal tariff elimination for these products. The support of firms in the industry is based on their status as both exporters and importers (end users) of these products, since PLCs and MCCs are consumed as inputs for overall control systems manufacturing.⁷⁵ For end users, lower-priced imported PLCs and MCCs could lead to more cost-effective manufacturing and commodity-processing operations in the United States. Accordingly, the U.S. industry expressed its support for including PLCs and MCCs along with other relay and industrial control equipment on the proposed ITA product expansion list.⁷⁶

Optical Media

Overview

The United States exported \$2.7 billion in optical media, including \$805 million in software for video game consoles and prerecorded video such as movies and television programming, in 2011. The United States is a leading producer and exporter of such entertainment software on optical media.⁷⁷ These products, when they contain entertainment software, currently face tariffs of up to 10 percent in major markets such as China, India, and Korea, and have been proposed for duty-free treatment under an

⁷⁵ Industry representative, telephone interview with USITC staff, December 3, 2012; industry representative, email communication to USITC staff, December 21, 2012.

⁷⁶ NEMA and Intel Corporation, written submissions to the USITC, September 6, 2012.

⁷⁷ Optical media not currently covered under the ITA are classified in HTS subheading 8523.40.50.

expanded ITA. Both the U.S. motion picture and video game software industries have expressed support for including entertainment software on optical media in the ITA.⁷⁸

Product description and scope

Some optical media products are already covered under the existing ITA and receive duty-free treatment in member country markets.⁷⁹ The exception is entertainment software classified under HTS subheading 8523.40.50, such as prerecorded movies and television shows, as well as video games intended for use on game consoles.⁸⁰ These goods, typically in the form of DVDs, are intended for either purchase or rental by household consumers.

U.S. industry

The United States is a major source of the intellectual property that goes into video games.⁸¹ The domestic video game publishing industry is growing, and revenues are expected to reach \$11.2 billion in 2012.⁸² Major U.S. game publishers include Activision, Blizzard Entertainment, Electronic Arts, Microsoft, Nintendo, and Sony.⁸³ According to the Entertainment Software Alliance (ESA), computer and video game companies directly and indirectly employ more than 120,000 workers in the United States, with average annual compensation of \$90,000.⁸⁴

The U.S. motion picture and television industry employs 2.4 million people.⁸⁵ Total industry revenues were \$87 billion in 2011 and are anticipated to increase at a 2.4 percent annualized rate to reach \$97.5 billion by 2017.⁸⁶ Over 40 percent of this revenue is generated from sales of optical media such as DVDs.⁸⁷ U.S. films account for the largest share of global revenues due to larger budget movies, vertical integration of production and distribution, and strong marketing efforts.⁸⁸ The U.S. film industry has become export dependent and reportedly maintains a positive trade balance with all of its trading partners.⁸⁹

⁷⁸ USITC, hearing transcript, November 8, 2012, 22 (testimony of Sage Chandler, CEA); MPAA, written submission to the USITC, November 8, 2012; RILA, written submission to the USITC, November 20, 2012; CERA, written submission to the USITC, November 20, 2012; ESA, written submission to the USITC, November 20, 2012.

⁷⁹ At the Commission's hearing on November 8, 2012, the Motion Picture Association of America (MPAA) expressed support for the inclusion of Digital Cinema Packs (DCPs) under an expanded ITA. These packs are hard disk drives on which movies for cinematic release are distributed. As these disk drives are magnetic, they are outside a discussion of optical media. Whether considered to be computer hardware or magnetic media, DCPs should, in theory, already be covered under the ITA.

⁸⁰ Video games to be played on computers rather than video game consoles are imported duty free under HTS subheading 8523.40.40.

⁸¹ The game publishers may or may not be the actual developers of the games. They may have licensed the rights to develop new games to other companies, or contracted with other companies to develop games.

⁸² IBISWorld, *Video Game Software Publishing in the U.S.*, August 2012, 39.

⁸³ Microsoft is one of the top three global game console makers (besides Japanese companies Nintendo and Sony). IBISWorld, *Video Game Software Publishing in the U.S.*, August 2012, 26.

⁸⁴ ESA, written submission to the USITC, November 20, 2012, 2.

⁸⁵ MPAA website, www.mpa.org/faq, (accessed December 21, 2012).

⁸⁶ IBISWorld, *Global Movie Production and Distribution*, October 2012, 4.

⁸⁷ *Ibid.*, 13.

⁸⁸ *Ibid.*, 15.

⁸⁹ Motion Picture Association of America (MPAA), written submission to the USITC, November 20, 2012, 2.

Benefits to the U.S. Industry of ITA Expansion

The expansion of the ITA to cover entertainment software on optical media will likely lead to increased export opportunities for U.S. producers, which are among the largest producers of this software.⁹⁰ The demand for video game content is growing in markets worldwide, particularly as access to broadband Internet increases, enabling interactive video game play. Similarly, demand for U.S. films continues to grow in foreign markets, such as Latin America, Russia, and China.⁹¹

Export opportunities

The inclusion of entertainment software on optical media in the ITA would likely increase U.S. exports to ITA member countries with relatively high tariffs, particularly China, India, and Korea, all with tariffs reaching 8 to 10 percent.⁹² The two largest markets for entertainment software on optical media, Canada and Mexico, already import these products duty free under the NAFTA, although Mexico is not a signatory to the ITA (table 3.6). If other non-ITA members in South America were to join the agreement, U.S. export opportunities would likely increase, since tariffs on these products in countries such as Brazil and Argentina can be as high as 16 percent.

TABLE 3.6 U.S. exports of entertainment software on optical media, major U.S. markets, and corresponding MFN tariff rates, 2011

HS code	Product description	Leading U.S. export markets	U.S. exports (million \$)	MFN tariff (percent ad valorem) ^a
8523.40.50	Entertainment software on optical media	<i>Canada</i>	576.6	0–6
		<i>Mexico</i>	123.0	0–10
		<i>EU^b</i>	20.6	0–3.5
		<i>Japan</i>	14.7	0
		<i>Hong Kong</i>	11.9	0
		All other	58.1	–
		Total	804.9	

Sources: Official statistics from the USDOC and WTO.

Note: Countries in italics are ITA members.

^aAd valorem tariffs are reported for the 6-digit subheading.

^bAmong EU members, the largest markets for U.S. exports of goods classified under HTS subheading 8523.40.50 in 2011 were the UK and Germany.

Both the motion picture and the video game software industries have expressed support for including entertainment software under HS heading 8523 in the ITA.⁹³ Game consoles themselves are also on the list of goods proposed for inclusion in the ITA. Eliminating tariffs on game consoles may increase demand for the video game software played on them, of which the United States is a leading exporter. By adding these products to the ITA, not only is it likely that trade in these products would increase, but trade could also

⁹⁰ Two of the top 3 companies ranked by revenue are headquartered in the United States; so are 4 of the top 10. <http://www.softwaretop100.org/gaming-company-top-25>, January 15, 2013.

⁹¹ MPAA, written submission to the USITC, November 20, 2012, 2.

⁹² The Korean tariff rate is from 2011. The U.S. FTA with Korea entered into force in March 2012, at which time the rate of duty on U.S. exports of prerecorded optical media other than computer software (8524.39.9000) to Korea was reduced to zero immediately.

⁹³ USITC, hearing transcript, November 8, 2012, 22 (testimony of Sage Chandler, CEA); MPAA, written submission to the USITC, November 8, 2012; RILA, written submission to the USITC, November 20, 2012; CERA, written submission to the USITC, November 20, 2012; ESA, written submission to the USITC, November 20, 2012.

increase in other products that are peripherals or accessories, such as loudspeakers, joysticks, steering wheels, or other controllers.⁹⁴ These products are part of a complementary ecosystem, and lower tariffs and increased market access would benefit the U.S. entertainment software industry, game publishers, and developers in particular.⁹⁵

Loudspeakers and Headsets

Overview

The United States ranks third, after China and Hong Kong, in global exports of loudspeakers, headsets, and related products, exporting \$1.4 billion in 2011.⁹⁶ The primary markets for such exports were Mexico, Canada, Japan, Hong Kong, the EU (Germany), and China. U.S. exports of loudspeakers and headsets to these markets faced duties ranging from zero to 15 percent. The U.S. industry would likely benefit from the elimination of duties on these goods under an expanded ITA and expressed support for including all audio products, including loudspeakers and headsets, in the ITA product coverage.⁹⁷

Product description and scope

All subheadings within HS 8518 encompassing products such as loudspeakers, headphones, microphones, amplifiers, and their parts, were included in the ITA proposed product expansion list from the USTR. Though a small portion of these products are already covered under the existing ITA, the goods discussed in this analysis—loudspeakers, whether or not mounted in enclosures, and headsets—represent an expansion of the existing coverage. Loudspeakers are used in such disparate applications as consumer goods, such as radios, televisions, and audio systems; computers; mass communication systems, such as public address systems or concert halls; and monitors in broadcast or recording studios. Headsets (also commonly termed headphones) include both those sets that are frames holding small speakers mounted in cups against the wearer's ears, and earbuds, where the output horn of a speaker is fed through a tube directly into the ear canal.

*U.S. industry*⁹⁸

Exports accounted for over 80 percent of the domestic loudspeaker industry's revenue in 2011.⁹⁹ It is estimated that 2011 loudspeaker domestic shipments amounted to approximately \$450 million.¹⁰⁰ Loudspeakers mounted in enclosures have accounted for the majority (about 60 percent) of these shipments over the past 5 years. U.S. loudspeaker manufacturers produce for high-end consumer use and for commercial/industrial use such as stadia/theaters, recording and broadcasting, and public communications systems. They

⁹⁴ The Consumer Electronics Association (CEA) and Entertainment Software Association (ESA) have expressed support for a variety of related products such as game consoles, related accessories, and stored value cards that allow access to online digital content.

⁹⁵ ESA, written submission to the USITC, November 20, 2012, 3, 5.

⁹⁶ Related products include microphones, amplifiers, and their parts classified under HS heading 8518. Global Trade Atlas, (accessed January 8, 2013).

⁹⁷ ITI, written submission to the USITC, November 20, 2012; RILA, written submission to the USITC, November 20, 2012; CERA, written submission to the USITC, November 20, 2012.

⁹⁸ Owing to a scarcity of publicly available industry data for headsets, this section is limited to the U.S. loudspeaker industry.

⁹⁹ IBISWorld, *Loudspeaker Manufacturing in the U.S.*, 2011, 22.

¹⁰⁰ Estimated by USITC from Census Bureau data.

also produce loudspeakers to be used as inputs to consumer goods such as televisions, intercoms, and computers.¹⁰¹

About 55 companies with a total of over 1,500 employees produced loudspeakers in the United States in 2011.¹⁰² Bose is the largest U.S. producer of loudspeakers, producing both domestically and overseas. Mitek, another domestic manufacturer of loudspeakers, reportedly exports to more than 20 countries. Mitek is a small firm, employing approximately 350 workers in loudspeaker production facilities in Arizona and Kentucky.¹⁰³ A number of other loudspeaker producers, such as Audiovox, which owns the Klipsch brand, and Dolby Digital, do not produce domestically, but rather develop the speaker technology or design loudspeakers in the United States for production by contract manufacturers in foreign countries.¹⁰⁴

Benefits to the U.S. Industry of ITA Expansion

Expanding the ITA to cover loudspeakers and headsets likely will increase U.S. export opportunities for these products. Headsets and loudspeakers are the primary means of delivering audio content, used with popular electronic devices such as tablets, smartphones, and portable digital music players. As global demand for these devices and their digital content grows, so does demand for loudspeakers and headsets. The rising use of hands-free cellphones is also increasing the demand for loudspeakers and headsets.¹⁰⁵ New products are also being developed that incorporate loudspeakers, such as bases that allow a mobile device to be used while charging, or wireless loudspeakers.

Export opportunities

ITA expansion would likely increase U.S. export opportunities in ITA member countries, such as India and the EU, that are already major markets for U.S. exports of loudspeakers and headsets in spite of the existing moderate to significant tariffs of up to 10 percent on these products (table 3.7). ITA expansion would likely offer additional U.S. export opportunities to ITA member countries with relatively high tariffs that represent smaller markets for U.S. exports of loudspeakers and headsets, such as the Philippines (up to 10 percent), Malaysia (up to 15 percent), and Vietnam (up to 30 percent).¹⁰⁶ Some countries that are not current ITA members also maintain significant tariffs on loudspeakers and headsets, such as Argentina (20 percent), Brazil (20 percent), and Russia (15 percent), and would offer important export opportunities for U.S. goods if they were to join the ITA.

If the ITA expansion includes HS subheading 8518.29 (other loudspeakers, whether or not mounted in their enclosures), domestic producers of loudspeakers that import these inputs could benefit from lower materials costs and subsequently more competitively priced end products. Virtually all consumer electronic goods, and many mobile devices,¹⁰⁷ incorporate loudspeakers, or rely upon accessory loudspeakers and headsets. As such, the U.S. industry expressed its support for including loudspeakers and headsets

¹⁰¹ IBISWorld, *Loudspeaker Manufacturing in the U.S.*, 2011, 12.

¹⁰² IBISWorld, *Loudspeaker Manufacturing in the U.S.*, 2011, 28.

¹⁰³ According to a written submission to the USITC, Mitek faces a 40 percent duty on exports of loudspeakers to China. CEA, written submission to USITC, November 20, 2012, 4–5.

¹⁰⁴ IBISWorld, *Loudspeaker Manufacturing in the U.S.*, 2011, 23–24.

¹⁰⁵ USITC, hearing transcript, November 8, 2012, 19 (testimony of Sage Chandler, CEA).

¹⁰⁶ *Ibid.*, 21.

¹⁰⁷ Includes smartphones and tablets.

in the ITA.¹⁰⁸ A reduction in the cost of these goods incorporated into consumer goods imported into the United States would also benefit U.S. consumers, by lowering the cost of the final product.

TABLE 3.7 U.S. exports of loudspeakers and headsets, major U.S. markets, and corresponding MFN tariff rates, 2011

HS code	Product description	Leading U.S. export markets	U.S. exports (million \$)	MFN tariff (percent ad valorem)
8518.21	Single speakers, enclosed	<i>EU</i>	38.8	4.5
		<i>Canada</i>	26.9	6.5
		<i>Japan</i>	18.2	0
		<i>India</i>	17.9	10.0
		Mexico	10.3	15.0
		All other	54.6	–
		World	166.7	
8518.22	Multiple speakers, enclosed	<i>EU</i>	31.2	4.5
		<i>Canada</i>	18.1	6.5
		Mexico	9.0	15.0
		<i>Singapore</i>	8.5	0
		Venezuela	8.0	15.0
		All other	63.4	–
		World	138.2	
8518.29	Speakers, unenclosed	<i>Canada</i>	52.1	0–6.5
		Mexico	28.9	0
		<i>China</i>	18.1	0
		<i>Japan</i>	16.4	0
		<i>EU</i>	13.9	0–3.0
		All other	54.5	–
		World	183.9	
8518.30	Headsets	<i>EU</i>	48.5	0–2.0
		<i>Canada</i>	30.5	0–4.5
		<i>Hong Kong</i>	15.3	0
		Mexico	11.6	0–15.0
		<i>Australia</i>	9.9	0–5.0
		All other	74.4	–
		World	190.2	

Sources: Office statistics from the USDOC and the WTO.

Note: ITA members are in italics.

¹⁰⁸ USITC, hearing transcript, November 8, 2012, 22 (testimony of Sage Chandler, CEA); RILA, written submission to the USITC, November 20, 2012; Best Buy, written submission to the USITC, November 20, 2012; CERA, written submission to the USITC, November 20, 2012.

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APPENDIX A
Request Letter

EXECUTIVE OFFICE OF THE PRESIDENT
THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON, D.C. 20508

The Honorable Irving A. Williamson
Chairman
United States International Trade Commission
500 E Street, S.W.
Washington, DC 20436

DOCKET NUMBER
2905
Office of the Secretary Int'l Trade Commission

JUL 30 2012

RECEIVED
JUL 31 2012
OFFICE OF THE SECRETARY U.S. INTL. TRADE COMMISSION

Dear Chairman Williamson:

Opening markets through elimination of tariff barriers has been an ongoing objective of this Administration. The successful conclusion of the Information Technology Agreement (ITA) in 1996 opened markets in 42 countries to U.S. exports of computers, semiconductors, telecommunications, software, and other electronics products. The ITA now includes 74 Participants representing 97 percent of trade in the products covered by the agreement. The elimination of duties under the ITA has helped to generate substantial growth in trade of information and communications technology (ICT) goods.

On June 30, 1997, under the authority provided in Section 111(b) of the Uruguay Round Agreements Act (URAA), the President proclaimed the reduction and eventual elimination of duties for products covered by the ITA. In section 111(b) of the URAA, Congress authorized the President to proclaim further modifications of any duty for articles contained in a tariff category that was part of a "zero-for-zero" (that is, reciprocal duty elimination) initiative during the Uruguay Round.

Early on, the ITA Participants recognized that rapidly changing technology and innovation cycles in the ICT sector, as well as differences in tariff nomenclature, made it essential that the product coverage under the agreement be subject to review and expansion. At a May 15, 2012, meeting in Geneva, there was broad agreement among ITA Participants to proceed with negotiations, which will be conducted under the auspices of the WTO, to expand ITA product coverage. A number of ITA Participants have prepared a draft list of products that could be considered for addition to ITA product coverage, and a more formal negotiating process is expected to commence in September. This list of products is attached.

On May 6, 2011, USTR published a notice in the *Federal Register* requesting comments on additional ICT products the United States should seek to include in and provide duty-free treatment for under the ITA, including both products that existed when the ITA was concluded in 1996, but that were not covered under the agreement, as well as products that have been developed since then. USTR also sought comments regarding which U.S. trading partners that are significant producers or consumers of ICT products that are not currently participants in the ITA, the United States should seek to have join the ITA. We received considerable detailed advice from U.S. stakeholders concerning both products that might be included in discussions in

The Honorable Irving A. Williamson
Page Two

an ITA expansion process, and trading partners that the United States should seek to have join the ITA.

Therefore I request, pursuant to section 115 of the URAA (19 U.S.C. 3524) and section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), that the Commission provide advice and information to USTR on the list of ICT products attached to this letter. This advice and information should be delivered in two reports.

In the first report, I request that the Commission, to the extent practicable, based on available information and information furnished by interested parties in response to the Commission's notice of investigation: (1) indicate both the ICT and non-ICT purposes for which each product on the attached list is used; and (2) identify the products that U.S. industry and other interested parties view as import-sensitive. I request that the Commission provide this report no later than October 24, 2012.

In the second report, I request that the Commission, to the extent practicable, identify for each of the products on the attached list: (1) tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports. I also request that the Commission provide an overview of selected key subsectors, and to the extent practicable, examine benefits to the U.S. industry of ITA expansion, including information on increased market access and export opportunities for products in these subsectors. I request that the Commission provide this second report no later than February 15, 2013.

It is the intent of this office that the Commission's reports be made available to the general public in their entirety. Therefore, the reports should not contain any confidential business or national security classified information.

Should my office, in the course of the Commission's investigation, identify information that clarifies definitions of the products on the attached list, we will formally notify that information to the Commission in writing. I appreciate your assistance and cooperation on this matter and look forward to working with you and your staff on these issues in the future.

Sincerely,

A handwritten signature in black ink, appearing to read "Ron Kirk", written over a horizontal line.

Ambassador Ron Kirk

Enclosures

ATTACHMENT A - bis

COVER NOTE: The following products have been proposed by Members to be subject to the obligations set out in the Information Technology Agreement. Some products included in this list may already be covered by the Agreement; the proposals for these items are without prejudice to participants' existing rights and obligations under the Agreement and the GATT 1994.

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
321511		Printing ink, black	There is more than one proposal for this HS code.
	ex	Printing ink (black) packaged in the ink jet cartridge	
321519		Printing ink, other than black	There is more than one proposal for this HS code.
	ex	Printing ink (other than black) packaged in the ink jet cartridge	
321590		Inks, other than printing ink	
350691	ex	Optically clear free-film adhesives for the manufacture of displays and touch screen panels	
370110		For X-ray (Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	
370130		Other plates and film, with any side exceeding 255 mm	
370199		Other ((Photographic plates and film in the flat, sensitised, unexposed, of any material other than paper, paperboard or textiles; instant print film in the flat, sensitised, unexposed, whether or not in packs.)	
370242		Of a width exceeding 610 mm and of a length exceeding 200 m, other than for colour photography (Other film, without perforations, of a width exceeding 105 mm)	
370243		Of a width exceeding 610 mm and of a length not exceeding 200 m (Other film, without perforations, of a width exceeding 105 mm)	
370244		Of a width exceeding 105 mm but not exceeding 610 mm (Other film, without perforations, of a width exceeding 105 mm)	
370590		Other photographic plates and film, exposed and developed, other than motion-picture film, including photomasks and reticules	
370710		Sensitizing emulsions	
370790		Other (Chemical preparation for photographic uses (other than varnishes, glues, adhesives and similar preparations); unmixed products for photographic uses, put up in measured portions or put up for retail sale in a form ready for use)	
390730	ex	Epoxide resins molding compounds for semiconductor encapsulation	There is more than one proposal for this HS code.
	ex	Glass and epoxy, cotton paper and epoxy, phenolic cotton paper and woven glass and epoxy resins for the manufacture of printed circuits	
392061	ex	Optical films of polycarbonates for the manufacture of LCD / LED displays and screens	
392062	ex	Optical films of poly(ethylene terephthalate) for the manufacture of LCD / LED displays and screens	
392190	ex	Other plates, sheets, film, foil and strip of plastics, flexible, not reinforced with paper or combined with textile materials for the manufacture of printed circuits	
392310	ex	Articles of plastic for the conveyance, packing or shipping of semiconductor wafers, masks, and reticles	
392690	ex	Plastic enclosures or cases for use in goods classified in 85.17	There is more than one proposal for this HS code.
	ex	Other articles of plastics for use in telecommunication and ICT devices	
481190		Other paper, paperboard, cellulose wadding and webs of cellulose fibres	
490700	ex	Documents of title, specifically licenses to use software in printed form	
491110	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	
491199	ex	Coded key cards, stored value cards and point of sale activation (POSA) cards for downloads and/or activation of games and software and other internet content and services and telecommunications services, or licenses to use software that are not documents of title	
690310	ex	Graphite or SiC (silicon carbide) crucible for the manufacture of semiconductor devices	
690911	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	
690919	ex	Ceramic wares of a kind used for the production or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, or flat panel displays	
700220	ex	Unworked glass rods of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	
700231	ex	Unworked glass tubes of fused quartz or other fused silica to provide optical elements for microlithography for semiconductor manufacturing	
700600		Glass of heading 70.03, 70.04 or 70.05, bent, edge-worked, engraved, drilled, enamelled or otherwise worked, but not framed or fitted with other materials	There is more than one proposal for this HS code.
	ex	High purity fused silica plates for the manufacture of photoblanks or photomasks, or otherwise designed for the manufacture or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof, or telecommunications equipment or parts or accessories of any of the foregoing	
701400	ex	Signaling glassware and optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, integrated circuits or flat panel displays	
701710	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
702000	ex	Articles of quartz or fused silica for the manufacture of or processing of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
741011	ex	Copper foil of refined copper not backed of thickness not exceeding 0.15mm designed for printed circuits	
741021	ex	Copper clad laminates backed with paper, paperboard, plastics, or similar backing materials of a thickness (excluding any backing) not exceeding 0.15 mm	
841381		Pumps (Other pumps; liquid elevators)	
841410	ex	Vacuum pumps of a kind used for the production of semiconductors or flat panel displays	
841459		Other Fans	There is more than one proposal for this HS code.
	ex	Fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	
841490	ex	Parts of fans and fan trays designed for cooling and insertion into microprocessors, computer hard drives, automatic data processing machines and units therefore, and telecommunications equipment	
841510	ex	Air conditioning machines which have apparatus for communication in wired or wireless network (of window or wall types, self-contained or "split-system")	There is more than one proposal for this HS code.
	ex	Air conditioning machines which can process digital signals or communicate with or without lines	
841810	ex	Combined refrigerator-freezers, fitted with separate external doors which can process digital signals or communicate with or without lines	
841821	ex	Household type and compression-type refrigerators which have apparatus for communication in wired or wireless network	There is more than one proposal for this HS code.
	ex	Refrigerators, household type : Compression-type, which can process digital signals or communicate with or without lines	
841829	ex	Refrigerators, household type : not compression-type, which can process digital signals or communicate with or without lines	
841899	ex	Parts of house hold type refrigerators, freezers and other refrigerating or freezing equipment electric or other; heat pumps, where the parts are related to the functions that process digital signals or communicate with or without lines.	
841939	ex	Spin dryers for machines and mechanical appliances for making semiconductors, flat panel displays and PCAs	
841950	ex	Heat exchange units to be used for the production of semiconductors and flat panel displays	
842010	ex	Roll laminators and laminate presses of a kind used for the production of printed circuits	
842129	ex	Liquid filtering equipment for semiconductor and flat panel display manufacturing	
842139	ex	Gas filtering equipment for semiconductor and flat panel display manufacturing	
842199	ex	Parts of filtering equipment for semiconductor and flat panel display manufacturing	
842489	ex	Spraying apparatus for etching, developing, stripping, or cleaning; or application of coating or sealants manufacture of printed circuits or printed circuit assemblies	
842490	ex	Parts for spraying apparatus for etching, developing, stripping or cleaning; or application of coating or sealants for the manufacture of printed circuits or printed circuit assemblies	
842890	ex	Other machines for lifting, handling, loading or unloading printed circuits or substrates for the manufacture of printed circuit or printed circuit assemblies	
843139	ex	Hard disk process carriers, transport carriers and similar items specially designed for the manufacturing, transport, or storage of hard disk drive components	
844230		Machinery, apparatus, and equipment	
844240		Parts of the foregoing machinery, apparatus, or equipment	
844250		Plates, cylinders and other printing components; plates, cylinders and lithographic stones, prepared for printing purposes (for example, planed, grained or polished)	There is more than one proposal for this HS code.
	ex	Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits	
	ex	Plates for applying solder, flex adhesive, or sealants to printed circuits	
844319		Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442)	
844331		Machines which perform two or more of the functions of printing, copying or facsimile transmission, capable of connecting to an automatic data-processing machine or to a network	
844332		Other, capable of connecting to an automatic data processing machine or to a network (Other printers, copying machines, and facsimile machines, whether or not combined)	There is more than one proposal for this HS code.
	ex	Screen printing machinery for the manufacture of printed circuit boards or printed wiring boards	
844339		Other (Other printers, copying machines and facsimile machines, whether or not combined)	
844391		Parts and accessories of printing machinery used for printing by means of plates, cylinders, and other printing components of heading 8442.	There is more than one proposal for this HS code.
	ex	Parts of Masks (Plates) for applying solder, adhesive, or sealant or legend (for marking component placement) or other labeling to printed circuits or substrates for the manufacture of printed circuits assemblies or printed circuits; Parts of plates for applying solder, flex adhesive, or sealants to printed circuits	
844399		Parts and Accessories, Other (Printing machinery used for printing by means of plates, cylinders and other printing components of heading 8442; other printers, copying machines and facsimile machines, whether or not combined; parts and accessories thereof)	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
845011	ex	Fully-automatic household or laundry-type washing machines which have apparatus for communication in wired or wireless network	There is more than one proposal for this HS code.
	ex	Household or laundry-type fully-automatic washing machines, which can process digital signals or communicate with or without lines	
845012	ex	Household or laundry-type washing machines, which can process digital signals or communicate with or without lines	
845019	ex	Household or laundry-type washing machines, including machines which both wash and dry, which can process digital signals or communicate with or without lines	
845090	ex	Parts of household or laundry-type washing machines, where the parts are related to the functions that process digital signals or communicate with or without lines.	
845610	ex	Machine tools operated by laser or other light or photo beam processes for drilling, routing, or marking printed circuit substrates or printed circuits	There is more than one proposal for this HS code.
	ex	Machine tools operated by laser or other light or photo beam processes for use in cutting process or drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
845620	ex	Machine-tools operated by ultrasonic processes for use in machining printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
845630	ex	Machine tools operated by electro-discharge processes for cutting wafers	
845690	ex	Plasma cleaner machines that remove organic contaminants from electron microscopy specimens and specimen holders in semiconductor production process	
845710	ex	Machining centres of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845811	ex	Numerically controlled (horizontal lathes) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845891	ex	Numerically controlled (other lathes) of a kind used for the production of parts of mobile devices, PC, semiconductor and flat panel displays.	
845921	ex	Numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
845961	ex	Numerically controlled (Other milling machines) numerically controlled (other drilling machines) of a kind used for the production of parts of mobile devices, automatic data processing machines, semiconductor or flat panel displays.	
846150	ex	Sawing or cutting-off machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846210	ex	Forging or die-stamping machines (including presses) and hammers of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846221	ex	Numerically controlled (Bending, folding, straightening or flattening machines (including presses)) of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846592	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits	There is more than one proposal for this HS code.
	ex	Milling or molding (by cutting) machines of a kind used for the production of printed circuits, or parts of mobile devices, automatic data processing machines, or flat panel displays.	
846593	ex	Grinding, sanding or polishing machines of a kind used for the production of parts of mobile devices, automatic data processing machines.	
846595	ex	Drilling machines for drilling holes in printed circuits or printed circuit laminate	There is more than one proposal for this HS code.
	ex	Drilling or mortising machines for use in drilling holes in printed circuits, parts of mobile devices, semiconductor or flat panel displays.	
846900		Typewriters other than printers of heading 84.43; wordprocessing machines.	
847210		Duplicating machines	
847230		Machines for sorting or folding mail or for inserting mail in envelopes or bands, machines for opening, closing or sealing mail and machines for affixing or cancelling postage stamps	
847290	ex	Automatic banknote dispensers, coinsorting machines, coin-counting, and other currency coin handling machines	
847310		Parts and accessories of the machines of heading 84.69	
847340		Parts and accessories of the machines of heading 8472	There is more than one proposal for this HS code.
	ex	Parts and accessories of the machines of heading 847210, automatic banknote dispensers, coinsorting machines, coin-counting in 847290, and other currency coin handling machines, and automatic teller machines in 847290	
847521		Machines for making optical fibers and preforms thereof	
847590	ex	Parts for machines described in 8475.21	
847689	ex	Money-changing machines	
847690	ex	Parts of money-changing machines and DVD vending kiosks	
847950		Industrial robots, not elsewhere specified or included	
847982	ex	Mixing, kneading or stirring machines, specifically machines for mixing etchant solutions for printed circuit assemblies	
847989	ex	Machines and mechanical appliances having individual functions which have apparatus for communication in wired or wireless network (not specified or included elsewhere in Chapter 84, other than those of subheadings 8479.10 to 8479.82)	There is more than one proposal for this HS code.
	ex	Automated electronic component placement machines for the manufacture of printed circuit assemblies	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
847990	ex	Parts for automated electronic component placement machines for the manufacture of printed circuit assemblies in subheading 847989	There is more than one proposal for this HS code.
	ex	Parts for covered articles in heading 8479	
848071	ex	Injection and compression moulds for the manufacture of semiconductor devices	
848110	ex	Pressure -reducing valves of a kind used for the production of semiconductor and flat panel display	
848130	ex	Check (nonreturn) valves of a kind used for the production of semiconductor and flat panel display	
848140	ex	Safety and release valves of a kind used for the production of semiconductor and flat panel display	
848180	ex	Hand operated-valves of a kind used for the production of semiconductor and flat panel display manufacturing	
848190	ex	Parts of covered valves	
848610		Machines and apparatus for the manufacture of boules or wafers	
848620		Machines and apparatus for the manufacture of semiconductor devices or of electronic integrated circuits	
848630		Machines and apparatus for the manufacture of flat panel displays	
848640		Machines and apparatus specified in Note 9(C) to this Chapter	
848690		Parts and accessories (Machines and apparatus of a kind used solely or principally for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays; machines and apparatus specified in Note 9 (C) to this chapter; parts and accessories)	
850110		Motors of an output not exceeding 37.5 W	
850151		Of an output not exceeding 750 W (Other AC motors, multi-phase)	
850152		Of an output exceeding 750 W but not exceeding 75 kW (Other AC motors, multi-phase)	
850163		Of an output exceeding 375 kVA but not exceeding 750 kVA (AC generators (alternators))	
850164		Of an output exceeding 750 kVA (AC generators (alternators))	
850300		Parts suitable for use solely or principally with the machines of heading 8501 or 8502	
850410		Ballasts for discharge lamps or tubes	
850421		Having a power handling capacity not exceeding 650 kVA (Liquiddielectric transformers)	
850422		Having a power handling capacity exceeding 650kVA but not exceeding 10,000 kVA (Liquiddielectric transformers)	
850423		Having a power handling capacity exceeding 10,000 kVA (Liquid dielectric transformers)	
850431		Having a power handling capacity not exceeding 1 kVA (Other transformers)	
850432	ex	Transformers having a power handling capacity exceeding 1 kVA but not exceeding 16 kVA for telecommunications equipment	
850433	ex	Transformers having a power handling capacity exceeding 16 kVA but not exceeding 500 kVA for telecommunications equipment	
850440		Static converters	
850450		Other Inductors	
850490		Parts of power supplies for automatic data processing machines or units thereof of heading 8471; of power supplies for goods of subheading 8443.31 or 8443.32; of power supplies for monitors of subheading 8528.41 or 8528.51 or projectors of subheading 8528.61.	There is more than one proposal for this HS code.
	ex	Parts for transformers for telecommunications equipment, static converters and inductors	
850511		Of metal (Permanent magnets and articles intended to become permanent magnets after magnetization)	
850519		Other than of metal (Permanent magnets and articles intended to become permanent magnets after magnetisation)	
850520		Electromagnetic couplings, clutches and brakes	
850590	ex	Electromagnets and permanent magnets designed for magnetic resonance imaging apparatus	
850610		Manganese dioxide (Primary cells and primary batteries)	
850650		Lithium (Primary cells and primary batteries)	
850720	ex	Other lead-acid storage batteries, excluding those used in motor vehicles	There is more than one proposal for this HS code.
	ex	Lead-acid accumulators for use in goods classified in 85.17	
850730	ex	Nickel-cadmium storage batteries, excluding those used in motor vehicles	
850740	ex	Nickel-iron electric storage batteries, excluding those used in motor vehicles	
850780		Other accumulators	There is more than one proposal for this HS code.
	ex	Other storage batteries excluding those used in motor vehicles	
	ex	Lithium-ion accumulators for use in goods classified in 85.17	
850790	ex	Parts, excluding parts used in batteries for use in motor vehicles	
851310	ex	Lamps using a LED light module as primary light source	
851390	ex	Parts for lamps using a LED light module as primary light source	
851430	ex	Solder ovens of a kind used for the production of printed circuits or printed circuit assemblies	There is more than one proposal for this HS code.
	ex	Five stage convection ovens of a kind used for the production of printed circuits	
851440	ex	Other equipment for the heat treatment of materials by induction or dielectric loss for the purpose of semiconductor manufacturing	
851490	ex	Parts for furnaces and ovens of a kind used for the production of printed circuits or printed circuit assemblies	
851519	ex	Other waver soldering machines for the manufacture of printed circuits and printed circuit assemblies	
851590	ex	Parts for covered articles in 8515.	
851650	ex	Microwave ovens which have apparatus for communication in wired or wireless network	

1	2	3	4
HS 2007	ex	Proposed Product Description	Comments
851660	ex	Electric ovens, other than microwave ovens which have apparatus for communication in wired or wireless network; cookers, cooking plates, boiling rings, grillers and roasters which have apparatus for communication in wired or wireless network	
851679	ex	Electro-thermic appliances of a kind used for domestic purposes which have apparatus for communication in wired or wireless network (other than those of subheadings 8516.10 to 8516.72)	
851761		Base stations	
851762		Machines for the reception, conversion and transmission or regeneration of voice, images or other data, including switching and routing apparatus.	
851769		Other (Other apparatus for transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network)).	There is more than one proposal for this HS code.
	ex	Other voices, images or data reception apparatus for radiotelephony or radiotelegraphy	
851770		Parts (Telephone sets, including telephones for cellular networks or for other wireless networks; Parts of other apparatus for the transmission or reception of voice, images or other data, including apparatus for communication in a wired or wireless network (such as a local or wide area network), other than transmission or reception apparatus of headings 84.43, 85.25, 85.27 or 85.28)	
851810		Microphones and stands therefore	There is more than one proposal for this HS code.
	ex	Microphones condenser, with a diameter of not exceeding 15 mm and wireless microphones, including transmission apparatus	
	ex	Microphones and stands therefore	
851821		Single loudspeakers, mounted in their enclosures	
851822		Multiple loudspeakers, mounted in the same enclosure	
851829		Other (Loudspeakers, whether or not mounted in their enclosures)	There is more than one proposal for this HS code.
	ex	Loudspeakers, whether or not mounted in their enclosures, other	
851830		Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	There is more than one proposal for this HS code.
	ex	Headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers	
	ex	Wireless handsets for telephonic apparatus	
	ex	Other wireless combined microphone / speaker sets	
851840		Audio-frequency electric amplifiers	
851850		Electric sound amplifier sets	
851890		Parts (Microphones and stands therefor; loudspeakers, whether or not mounted in their enclosures; headphones and earphones, whether or not combined with a microphone, and sets consisting of a microphone and one or more loudspeakers; audio-frequency electric amplifiers; electric sound amplifier sets.)	
851920		Apparatus operated by coins, banknotes, bank cards, tokens or by other means of payment	
851930		Turntables (record-decks)	
851981		Using magnetic, optical or semiconductor media (Sound recording or reproducing apparatus- Other apparatus)	
851989		Other (Sound recording or reproducing apparatus)	
852110		Magnetic tape-type	
852190		Other (Video recording or reproducing apparatus, whether or not incorporating a video tuner)	
852210		Pick-up cartridges	
852290		Other (Parts and accessories suitable for use solely or principally with the apparatus of headings 85.19 to 85.21)	There is more than one proposal for this HS code.
	ex	Other, including multi-component Integrated circuits incorporated as a part of electronic surveillance equipment, but excluding cabinets and cases of wood	
852321		Cards incorporating a magnetic stripe	There is more than one proposal for this HS code.
	ex	Cards incorporating a magnetic stripe, use for recording data or programs in code form for automatic data processing machines, whether or not recorded.	
852329		Other (Magnetic media)	
852340		Optical media	
852351		Solid-state non-volatile storage devices	
852352		Smart cards	
852359		Other (Semiconductor media)	
852380		Other (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	There is more than one proposal for this HS code.
	ex	Other, other than acetate discs for record players (Discs, tapes, solid-state non-volatile storage devices, "smart cards" and other media for the recording of sound or of other phenomena, whether or not recorded, including matrices and masters for the production of discs, but excluding products of Chapter 37.)	
852550		Transmission apparatus	
852560		Transmission apparatus incorporating reception apparatus	
852580		Television cameras, digital cameras and video camera recorders	

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HS 2007	ex	Proposed Product Description	Comments
852610		Radar apparatus	
852691		Radio navigational aid apparatus	
852692		Radio remote control apparatus	
852712		Pocket-size radio cassette-players	
852713		Other apparatus combined with sound recording or reproducing apparatus	
852719		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852721		Other radio-broadcast receivers capable of operating without an external source of power	
852729		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852791		Combined with sound recording or reproducing apparatus	
852792		Not combined with sound recording or reproducing apparatus but combined with a clock	
852799		Other (Reception apparatus for radio-broadcasting, whether or not combined, in the same housing, with sound recording or reproducing apparatus or a clock.)	
852849		Other (Cathode-ray tube monitors)	
852859		Other (Other monitors)	
	ex	Monitors, not incorporating television reception apparatus with a diagonal size of 24 inches or less (excl with cathode ray tube and those of a kind solely or principally used in an automatic data-processing machine of heading 8471)	There is more than one proposal for this HS code.
852869		Other (Projectors)	
852871		Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, not designed to incorporate a video display or screen	
852872		Other, colour (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	
	ex	Reception apparatus for television, colour, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	There is more than one proposal for this HS code.
852873		Other, black and white or other monochrome (Reception apparatus for television, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus)	
	ex	Reception apparatus for television, black and white or other monochrome, whether or not incorporating radio-broadcast receivers or sound or video recording or reproducing apparatus, designed to incorporate a video display or screen with a diagonal size of 24 inches or less	There is more than one proposal for this HS code.
852910		Aerials and aerial reflectors of all kinds; parts suitable for use therewith	
	ex	Other aerials and aerial reflectors of a kind used with transmission apparatus for radio-broadcasting or television	There is more than one proposal for this HS code.
852990		Other (Parts suitable for use solely or principally with the apparatus of headings 85.25 to 85.28.)	
	ex	Other, including multi-component integrated circuits incorporated as a part of set-top box, but excluding cabinets and cases of wood	There is more than one proposal for this HS code.
853010		Equipment for railways or tramways (Electrical signalling, safety or traffic control equipment for railways, tramways, roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	
853080		Other equipment (Electrical signalling, safety or traffic control equipment for roads, inland waterways, parking facilities, port installations or airfields (other than those of heading 86.08))	
853090		Parts (Electrical signalling, safety or traffic control equipment which is controlled with automatic data processing machines (other than those heading 86.08))	
853180		Other apparatus (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30.)	
	ex	CRT indicator panels and displays	There is more than one proposal for this HS code.
853190		Parts (Electric sound or visual signalling apparatus (for example, bells, sirens, indicator panels, burglar or fire alarms), other than those of heading 85.12 or 85.30)	
	ex	Parts of Electric sound or visual signalling apparatus, other than those of heading 85.12 or 85.30. (excluding for burglar or fire alarms and similar apparatus)	There is more than one proposal for this HS code.
853540		Lightning arresters, voltage limiters and surge suppressors	
853590		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, fuses, lightning arresters, voltage limiters, surge suppressors, plugs and other connectors, junction boxes), for a voltage exceeding 1,000 volts.)	
853610		Fuses	
853620		Automatic circuit breakers	
853630		Other apparatus for protecting electrical circuits	
	ex	Power strips and surge protectors	There is more than one proposal for this HS code.
853641		For a voltage not exceeding 60 V (Relays)	
	ex	Electrical relays for a voltage not exceeding 60v designed for industrial automation applications	There is more than one proposal for this HS code.
853649		Other (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	
	ex	Other relays designed for industrial automation applications	There is more than one proposal for this HS code.
853650		Other switches	

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HS 2007	ex	Proposed Product Description	Comments
853661		lamp-holder	
853669		Other (lamp-holders, plugs, and sockets)	
853670		Connectors for optical fibres, optical fibre bundles or cables	
853690		Other apparatus (Electrical apparatus for switching or protecting electrical circuits, or for making connections to or in electrical circuits (for example, switches, relays, fuses, surge suppressors, plugs, sockets, lamp-holders and other connectors, junction boxes), for a voltage not exceeding 1,000 volts; connectors for optical fibres, optical fibre bundles or cables.)	There is more than one proposal for this HS code.
	ex	Wafer probing plates, probe cards, prober docking hardware, prober docking manipulator, or other items designed for testing semiconductor wafers	
853710		For a voltage not exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	
853720		For a voltage exceeding 1,000 V (Boards, panels, consoles, desks, cabinets and other bases, equipped with two or more apparatus of heading 85.35 or 85.36, for electric control or the distribution of electricity, including those incorporating instruments or apparatus of Chapter 90, and numerical control apparatus, other than switching apparatus of heading 85.17.)	
853810		Boards, panels, consoles, desks, cabinets and other bases for the goods of heading 85.37, not equipped with their apparatus	
853890		Other (Parts suitable for use solely or principally with the apparatus of heading 85.35, 85.36 or 85.37.)	There is more than one proposal for this HS code.
	ex	Parts for items in 8536 and 8537, specifically printed circuit assemblies, molded parts, other parts of switchgear, switchboards, panel boards and distribution boards and adaptors of heading 8537	
853939	ex	Cool cathode lamp for the manufacture of flat panel displays	
853949		Other (Ultra-violet or infra-red lamps; arc-lamps)	
854011		Colour (Cathode-ray television picture tubes, including video monitor cathode-ray tubes)	
854012		Black and white or other monochrome (cathode-ray television picture tubes, including video monitor cathode-ray tubes)	
854020		Television camera tubes; image converters and intensifiers; other photo-cathode tubes	There is more than one proposal for this HS code.
	ex	Television camera tubes; image converters and intensifiers; other photo-cathode tubes, for use with articles of headings 85.25	
854040		Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm	There is more than one proposal for this HS code.
	ex	Data/graphic display tubes, colour, with a phosphor dot screen pitch smaller than 0.4 mm, for use with articles of headings 85.25	
854050		Data/graphic display tubes, black and white or other monochrome	There is more than one proposal for this HS code.
	ex	Data/graphic display tubes, black and white or other monochrome, for use with articles of headings 85.25	
854060		Other cathode-ray tubes	There is more than one proposal for this HS code.
	ex	Other cathode-ray tubes, for use with articles of headings 85.25	
854071		Magnetrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Magnetrons, for use with articles of headings 85.25	
854072		Klystrons (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	
854079		Other (Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Other microwave tubes, for use with articles of headings 85.25	
854081		Receiver or amplifier valves and tubes	There is more than one proposal for this HS code.
	ex	Receiver or amplifier valves and tubes, for use with articles of headings 85.25	
854089		Other (Other valves and tubes)	
854091		Of cathode-ray tubes (Parts)	
854099		Other (Parts of Microwave tubes (for example, magnetrons, klystrons, travelling wave tubes, carcinotrons), excluding grid-controlled tubes)	There is more than one proposal for this HS code.
	ex	Parts of valves and tubes, other than cathode-ray, for use with articles of headings 85.25	
854231		Processors and controllers, whether or not combined with memories, converters, logic circuits, amplifiers, clock and timing circuits, or other circuits (Electronic integrated circuits)	
854232		Memories (Electronic integrated circuits)	
854233		Amplifiers (Electric integrated circuits)	
854239		Other (Electronic integrated circuits)	
854310		Particle accelerators	
854320		Signal generators	
854330	ex	Electroplating and electrolysis machines for applying various metals to printed circuits and printed circuit assemblies	
854370		Other machines and apparatus (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	There is more than one proposal for this HS code.
	ex	Articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks	
	ex	Microwave amplifiers	

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HS 2007	ex	Proposed Product Description	Comments
854390		Parts (Electrical machines and apparatus, having individual functions, not specified or included elsewhere in this Chapter.)	
	ex	Parts of signal generators; electroplating and electrolysis machines for copper to printed circuits and printed circuit substrates; articles designed for connection to telegraphic or telephonic apparatus or instruments or to telegraphic or telephonic networks; microwave amplifiers; and electrical machines with translation or dictionary functions. Printed circuit assemblies for parts of equipment in 8543	There is more than one proposal for this HS code.
854411		Of copper (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	
854419		Other (Winding Wire) (Insulated (including enamelled or anodised) wire, cable (including co-axial cable) and other insulated electric conductors, whether or not fitted with connectors; optical fibre cables, made up of individually sheathed fibres, whether or not assembled with electric conductors or fitted with connectors.)	
854420		Coaxial cable and other coaxial electric conductors	
854442		Fitted with connectors (Other electric conductors, for a voltage not exceeding 1,000 V)	
854449		Other (Other electric conductors, for a voltage not exceeding 1,000 V)	
854460		Other electric conductors, for a voltage exceeding 1,000 V (Other electric conductors, for a voltage not exceeding 1,000 V)	
854519		Other (Electrodes) (Carbon electrodes, carbon brushes, lamp carbons, battery carbons and other articles of graphite or other carbon, with or without metal, of a kind used for electrical purposes.)	
854590	ex	Other carbon, with or without metal, of a kind used for electrical purpose (excluding carbons rod, electrodes, brushes)	
854710	ex	Insulated fittings of ceramics for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
854790	ex	Quartz or fused silica insulated fittings for the manufacture of semiconductor boules or wafers, semiconductor devices, electronic integrated circuits or flat panel displays	
880260	ex	Communications satellites	
880390	ex	Parts of communications satellites	
900110		Optical fibres, optical fibre bundles and cables	
900120		Sheets and plates of polarising material	
900190		Other (Optical fibres and optical fibre bundles; optical fibre cables other than those of heading 85.44; sheets and plates of polarising material; lenses (including contact lenses), prisms, mirrors and other optical elements, of any material, unmounted, other than such elements of glass not optically worked.)	
	ex	Optical elements for the manufacture of semiconductor boules or wafers, semiconductor devices, lithography equipment, electronic integrated circuits, flat panel displays, automatic data processing machines or units thereof (wherever classified), or telecommunications equipment or parts or accessories of any of the foregoing	There is more than one proposal for this HS code.
	ex	Optical films cut to shape and size for the manufacture of LCD / LED displays and screens	
900211		For cameras, projectors or photographic enlargers or reducers (Objective lenses)	
900219		Other (Objective lenses)	
900220		Filters (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	
900290		Other (Lenses, prisms, mirrors and other optical elements, of any material, mounted, being parts of or fittings for instruments or apparatus, other than such elements of glass not optically worked.)	
900661		Discharge lamp ("electronic") flashlight apparatus	
900669		Other (Parts and accessories) (Photographic (other than cinematographic) cameras; photographic flashlight apparatus and flashbulbs other than discharge lamps of heading 85.39.)	
900820		Microfilm, microfiche or other microform readers, whether or not capable of producing copies	
900830		Other image projectors	
900840		Photographic (other than cinematographic) enlargers and reducers	
900890		Parts and accessories (Image projectors, other than cinematographic; photographic (other than cinematographic) enlargers and reducers.)	
901050		Other apparatus and equipment for photographic (including cinematographic) laboratories; negatoscopes	
901060		Projection screens	
901090		Parts and accessories (Apparatus and equipment for photographic (including cinematographic) laboratories, not specified or included elsewhere in this Chapter; negatoscopes; projection screens.)	
	ex	Parts and accessories for articles in 9010.50 and 9010.60.	There is more than one proposal for this HS code.
901110		Stereoscopic microscopes	
901120		Other microscopes, for photomicrography, cinemicrophotography or microprojection	
901180		Other microscopes (Compound optical microscopes, including those for photomicrography, cinemicrophotography or microprojection.)	
901190		Parts and accessories (Compound optical microscopes, including those for photomicrography, cinemicrophotography or microprojection.)	
901210		Microscopes other than optical microscopes; diffraction apparatus	

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HS 2007	ex	Proposed Product Description	Comments
901290		Parts and accessories (Microscopes other than optical microscopes; diffraction apparatus.)	
901310		Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.	
901320		Lasers, other than laser diodes	There is more than one proposal for this HS code.
	ex	Lasers and light sources and parts thereof for the manufacture of semiconductors or flat panel displays	
901380		Other devices, appliances and instruments (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	
901390		Parts and Accessories (Liquid crystal devices not constituting articles provided for more specifically in other headings; lasers, other than laser diodes; other optical appliances and instruments, not specified or included elsewhere in this Chapter.)	There is more than one proposal for this HS code.
	ex	Parts and accessories for flat panel displays, liquid crystal displays, attenuator fiber optic for telecommunication networks, and laser and light sources designed for the manufacture of semiconductor or flat panel displays	
901410		Direction finding compasses	
901420		Instruments and appliances for aeronautical or space navigation (other than compasses)	
901480		Other optical navigational instruments	There is more than one proposal for this HS code.
	ex	Other optical navigational instruments, excluding ships' logs and depth-sounding apparatus	
901490		Parts and accessories (Direction finding compasses; other navigational instruments and appliances; parts and accessories thereof)	
901510		Rangefinders	
901520		Theodolites and tachymeters (tachymeters)	
901530		Levels	
901540		Photogrammetrical surveying instruments and appliances	
901580		Other instruments and appliances	
901590		Parts and accessories (Surveying (including photogrammetrical surveying), hydrographic, oceanographic, hydrological, meteorological or geophysical instruments and appliances, excluding compasses; rangefinders; parts and accessories thereof)	
901600		Balances of a sensitivity of 5 cg or better, with or without weights.	
901730	ex	Micrometers	
901780	ex	Other instruments for measuring length	
901790		Parts and accessories of 90.17	
901811		Electro-cardiographs	
901812		Ultrasonic scanning apparatus	
901813		Magnetic resonance imaging apparatus	
901814		Scintigraphic apparatus	
901819		Other (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	
901820		Ultra-violet or infra-red ray apparatus	
901849		Other (Other instruments and appliances, used in dental sciences)	
901850		Other ophthalmic instruments and appliances	
901890		Other instruments and appliances (Instruments and appliances used in medical, surgical, dental or veterinary sciences, including scintigraphic apparatus, other electro-medical apparatus and sight-testing instruments.)	
902212		Computed tomography apparatus	
902213		Other, for dental uses (Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902214		Other, for medical, surgical or veterinary uses ((Apparatus based on the use of X-rays, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902219		For other uses (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	
902221		For medical, surgical, dental or veterinary uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902229		For other uses (Apparatus based on the use of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus)	
902230		X-ray tubes	
902290		Other, including parts and accessories (Apparatus based on the use of X-rays or of alpha, beta or gamma radiations, whether or not for medical, surgical, dental or veterinary uses, including radiography or radiotherapy apparatus, X-ray tubes and other X-ray generators, high tension generators, control panels and desks, screens, examination or treatment tables, chairs and the like.)	
902300		Instruments, apparatus and models, designed for demonstrational purposes (for example, in education or exhibitions), unsuitable for other uses.	

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HS 2007	ex	Proposed Product Description	Comments
902410		Machines and appliances for testing metals	
902480		Other machines and appliances (Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	
902490		Machines and appliances for testing the hardness, strength, compressibility, elasticity or other mechanical properties of materials (for example, metals, wood, textiles, paper, plastics).	
902511		Liquid-filled, for direct reading (Thermometers and pyrometers, not combined with other instruments)	
902519		Other (Thermometers and pyrometers, not combined with other instruments)	
902580		Other instruments (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	
902590		Parts (Hydrometers and similar floating instruments, thermometers, pyrometers, barometers, hygrometers and psychrometers, recording or not, and any combination of these instruments.)	
902710		Gas or smoke analysis apparatus	
902750		Optical radiations (UV, visible, IR)	
902780		Other instruments and apparatus (Instruments and apparatus for physical or chemical analysis (for example, polarimeters, refractometers, spectrometers, gas or smoke analysis apparatus); instruments and apparatus for measuring or checking viscosity, porosity, expansion, surface tension or the like; instruments and apparatus for measuring or checking quantities of heat, sound or light (including exposure meters); microtomes)	
902790		Microtomes; parts and accessories	
902810		Gas meters	
902820		Liquid meters	
902830		Electricity meters	
902890		Parts and accessories (Gas, liquid or electricity supply or production meters, including calibrating meters therefor)	
902910		Revolution counters, production counters, taximeters, mileometers, pedometers and the like	
902920		Speed indicators and tachometers; stroboscopes	
902990		Parts and accessories (Revolution counters, production counters, taximeters, mileometers, pedometers and the like; speed indicators and tachometers, other than those of heading 90.14 or 90.15; stroboscopes.)	
903010		Instruments and apparatus for measuring or detecting ionising radiations	
903020		Oscilloscopes and oscillographs	
903031		Multimeters without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903032		Multimeters with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903033		Other, without a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903039		Other, with a recording device (Other instruments and apparatus, for measuring or checking voltage, current, resistance or power)	
903084		Other, with a recording device (Other instruments and apparatus)	
903089		Other (Other instruments and apparatus)	
903090		Parts and Accessories (Oscilloscopes, spectrum analysers and other instruments and apparatus for measuring or checking electrical quantities, excluding meters of heading 90.28; instruments and apparatus for measuring or detecting alpha, beta, gamma, X-ray, cosmic or other ionising radiations.)	
903110		Machines for balancing mechanical parts	
903120		Test benches	
903149		Other (Other optical instruments and appliances)	
903180		Other instruments, appliances and machines (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	
903190		Parts and Accessories (Measuring or checking instruments, appliances and machines, not specified or included elsewhere in this Chapter; profile projectors.)	
	ex	Parts and accessories in 9031, except for parts for equipment for testing engines	There is more than one proposal for this HS code.
903210		Thermostats	
	ex	Thermostats for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.
903220		Manostats	
	ex	Manostats (automatic regulating or controlling instruments and apparatus) for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.
903281		Hydraulic or pneumatic (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	
	ex	Process control modules and complete systems	
	ex	Automatic regulating or controlling instruments and apparatus of hydraulic or pneumatic for manufacturing of semiconductors or flat panel displays	There is more than one proposal for this HS code.

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HS 2007	ex	Proposed Product Description	Comments
903289		Other (Other instruments and apparatus) (Automatic regulating or controlling instruments and apparatus.)	There is more than one proposal for this HS code.
	ex	Other automatic regulating or controlling instruments and apparatus for manufacturing of semiconductors or flat panel displays	
903290		Parts and accessories (Automatic regulating or controlling instruments and apparatus.)	There is more than one proposal for this HS code.
	ex	Parts and accessories, except for parts of thermostats and manostats	
	ex	Parts and accessories (Automatic regulating or controlling instruments and apparatus.) for manufacturing of semiconductors or flat panel displays	
903300		Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90.	There is more than one proposal for this HS code.
	ex	Parts and accessories (not specified or included elsewhere in this Chapter) for machines, appliances, instruments or apparatus of Chapter 90 for manufacturing of semiconductors or flat panel displays	
940510	ex	Chandeliers and other electric ceiling or wall lighting fittings using a LED light module as primary light source, excluding those of a kind used for lighting public open spaces or thoroughfares	
940520	ex	Electric table, desk, bedside or floor-standing lamps using a LED light module as primary light source	
940530	ex	Lighting sets of a kind used for Christmas trees using LED light modules as primary light source	
940540	ex	Other electric lamps and lighting fittings using a LED light module as primary light source	
940560	ex	Illuminated signs, illuminated name -plates and the like using a LED light module as primary light source	
940591	ex	Parts of glass for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
940592	ex	Parts of plastics for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
940599	ex	Other parts for ex 9405.10, ex 9406.20, ex 9504.30, ex 9504.40, 9504.50 and ex 9504.60	
950410		Video games of a kind used with a television receiver	
950430		Other games, operated by coins, banknotes, bank cards, tokens or by other means of payment, other than bowling alley equipment	
950490	ex	Video game machines capable of connecting to a wired or wireless network, whether or not portable, other than those of subheading 9504.10, and parts and accessories thereof	There is more than one proposal for this HS code.
	ex	Game machines other than coin-operated arcade games and parts and accessories including game controllers, game cartridges, cases, steering wheels, etc.; 'Parts' for hand-held gaming consoles	
	ex	Electronic games and parts of video, electronic games	
961210		Ribbons (Typewriter or similar ribbons, inked or otherwise prepared for giving impressions, whether or not on spools or in cartridges; ink -pads, whether or not inked, with or without boxes.)	

ATTACHMENT B - bis

Positive list of specific products proposed to be covered by this agreement wherever they are classified in the HS.

1	2
Description	Comments
Multi-chip integrated circuits (MCPs) consisting of two or more interconnected monolithic integrated circuits combined to all intents and purposes indivisibly, whether or not on one or more insulating substrates, with or without lead frames, but with no other active or passive circuit elements, wherever classified.	
Multi-component integrated circuits (MCOs), wherever classified	
<p>Multi-component integrated circuits (MCOs) are a combination of one or more monolithic, hybrid, and/or multi-chip integrated circuits with one or more componentsA classifiable under heading 8532, 8533 or 8541, inductors classifiable under heading 8504, or silicon based MEMSB; formed to all intents and purposes indivisibly into a single body like an integrated circuit, as a component of a kind used for assembly onto a printed circuit board (PCB) or other carrier, through the connecting of pins, leads, balls, lands, bumps, or pads.</p> <p>A: The components may be discrete, manufactured independently then assembled onto the rest of the MCO, or integrated into other components, so they are not outwardly visible.</p> <p>B: Silicon basediv MEMS includes silicon based sensors, actuators, oscillators, resonators and combinations thereof. Silicon based sensors consist of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of detecting physical or chemical quantitiesi and transforming theseii into electric signals, caused by resulting variations[s] in electronic propertiesiii or displacement of a mechanical structure.</p> <p>Silicon based actuators consist of microelectronic and mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of transforming electrical signals into physical movement. Silicon based resonators and silicon based oscillators consists of microelectronic and/or mechanical structures that are created in the mass or on the surface of a semiconductor and that have the function of generating a mechanical or electrical oscillation of a predefined frequency that depends on the physical geometry of these structures.</p> <p>i Physical quantities relating to real world phenomena, such as pressure, acoustic waves, acceleration, vibration, movement, orientation, strain, magnetic field strength, electric field strength, light, radioactivity, humidity, flow, chemicals concentration etc.</p> <p>ii e.g. energy, mechanical displacement, photo-signals, etc.</p> <p>iii e.g. resistance, capacitance</p> <p>iv "Silicon based" refers to devices built on a silicon substrate, or made of silicon materials, or manufactured onto integrated circuit die</p>	<p>There is more than one proposal for this product.</p>
Set-top boxes, wherever classified	
Monitors, of liquid crystal display	
Liquid crystal modules	
LED(light-emitting diode) lamps	
LED(light-emitting diode) arrays	

APPENDIX B
***Federal Register* Notice**

SUPPLEMENTARY INFORMATION: On July 6, 2012, the Commission established a schedule for this expedited review (77 FR 42762, July 20, 2012). On July 31, 2012 (77 FR 45337), the Department of Commerce published a notice extending its time limits for issuing preliminary and final results in the second five-year review of the antidumping duty order on Folding Gift Boxes from China. Given this extension by Commerce, the date for the Commission's final determination is also extended pursuant to 19 U.S.C. 1675(c)(5)(B). Accordingly, the Commission is postponing the release of its staff report and final comment date until after Commerce's preliminary determination scheduled for October 19, 2012. At that time, the Commission will establish revised dates for the release of the report and the submission of final comments.

For further information concerning this review see the Commission's notice cited above and the Commission's Rules of Practice and Procedure, part 201, subparts A through E (19 CFR part 201), and part 207, subparts A and C (19 CFR part 207).

Authority: This review is being conducted under authority of title VII of the Tariff Act of 1930; this notice is published pursuant to section 207.21 of the Commission's rules.

Issued: August 8, 2012.

By order of the Commission.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2012-19792 Filed 8-10-12; 8:45 am]

BILLING CODE P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 332-532; Investigation No. 332-536]

The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1; The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2

AGENCY: United States International Trade Commission.

ACTION: Institution of investigations, opportunity to provide written submissions, and scheduling of public hearing in investigation No. 332-536.

SUMMARY: Following receipt of a request on July 31, 2012, from the United States Trade Representative (USTR) under section 115 of the Uruguay Round Agreements Act (19 U.S.C. 3524) and section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)), the U.S. International Trade Commission

(Commission) instituted two investigations for the purpose of providing the requested advice and information: investigation No. 332-532, *The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1*, and investigation No. 332-536, *The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2*.

DATES:

Investigation No. 332-532

September 6, 2012: Deadline for filing written submissions from interested parties.

October 24, 2012: Transmittal of Commission's report to USTR.

Investigation No. 332-536

October 31, 2012: Deadline for filing requests to appear at the public hearing.

November 2, 2012: Deadline for filing pre-hearing briefs and statements.

November 8, 2012: Public hearing.

November 20, 2012: Deadline for filing post-hearing briefs and written submissions from interested parties.

February 15, 2013: Transmittal of the Commission's report to USTR.

ADDRESSES: All Commission offices, including the Commission's hearing rooms, are located in the United States International Trade Commission Building, 500 E Street SW., Washington, DC. All written submissions should be addressed to the Secretary, United States International Trade Commission, 500 E Street SW., Washington, DC 20436. The public record for these investigations may be viewed on the Commission's electronic docket (EDIS) at <https://edis.usitc.gov/edis3-internal/app>.

FOR FURTHER INFORMATION CONTACT:

Project Leader Shannon Gaffney (202-205-3316 or Shannon.Gaffney@usitc.gov) or Deputy Project Leaders Heidi Colby-Oizumi (202-205-3391 or Heidi.Colby@usitc.gov) or Jeanette Leary (202-205-2043 or Jeanette.Leary@usitc.gov) for information specific to these investigations. For information on the legal aspect of these investigations, contact William Gearhart of the Commission's Office of the General Counsel (202-205-3091 or william.gearhart@usitc.gov). The media should contact Margaret O'Laughlin, Office of External Relations (202-205-1819 or margaret.oloughlin@usitc.gov). Hearing-impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal at 202-205-1810. General information concerning the Commission may also be obtained by accessing its Internet server

(<http://www.usitc.gov>). Persons with mobility impairments who will need special assistance in gaining access to the Commission should contact the Office of the Secretary at 202-205-2000.

Background: In his letter the USTR said that a number of participants in the Information Technology Agreement (ITA) have prepared a draft list of products that could be considered for addition to ITA product coverage, and that a more formal negotiating process is expected to begin in September 2012.

The USTR furnished the Commission with a list of the products, which can be found at http://www.usitc.gov/research_and_analysis/ongoing/documents/Request_letter_332-532.pdf or http://www.usitc.gov/research_and_analysis/ongoing/documents/Request_letter_332-536.pdf. Section 115 of the URAA requires the President to obtain the advice of the Commission in connection with any modifications in duty that are subject to the consultation and layover requirements of section 115.

The USTR has asked the Commission to provide advice and information in two reports and the Commission has instituted two separate investigations for the purpose of preparing these reports.

Investigation No. 332-532, The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 1

In its first report (investigation No. 332-352), the Commission will, as requested by the USTR and to the extent practicable, based on available information and information furnished by interested parties in response to this notice, (1) indicate both the information and communications technology (ICT) purposes and non-ICT purposes for which each product on the list is used, and (2) identify the products that U.S. industry and other interested parties view as import-sensitive. The Commission will provide this report to the USTR by October 24, 2012.

Investigation No. 332-536, The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2

In its second report (investigation No. 332-356), the Commission will, as requested by the USTR and to the extent practicable, identify for each of the listed products: (1) Tariffs in major markets; (2) major producing countries; (3) leading U.S. export markets; and (4) leading sources of U.S. imports. The Commission will also provide an overview of selected key subsectors, and to the extent practicable, examine benefits to the U.S. industry of ITA

expansion, including information on increased market access and export opportunities for products in these subsectors. The Commission will provide this report to the USTR by February 15, 2013.

Public Hearing: A public hearing in connection with investigation No. 332-536 will be held at the U.S. International Trade Commission Building, 500 E Street SW., Washington, DC, beginning at 9:30 a.m. on November 8, 2012. Requests to appear at the public hearing should be filed with the Secretary no later than 5:15 p.m., October 31, 2012. All pre-hearing briefs and statements should be filed no later than 5:15 p.m. November 2, 2012; and all post-hearing briefs and statements should be filed no later than 5:15 p.m. November 20, 2012. All such briefs and statements should otherwise comply with the filing requirements in the "Submissions" section below. In the event that, as of the close of business on October 31, 2012, no witnesses are scheduled to appear at the hearing, the hearing will be canceled. Any person interested in attending the hearing as an observer or nonparticipant should contact the Office of the Secretary at 202-205-2000 after October 31, 2012, for information concerning whether the hearing will be held.

Written Submissions: Interested parties are invited to file written submissions concerning both investigations. For investigation No. 332-532, interested parties are asked to provide information on (1) the ICT and non-ICT purposes for which products on the attached list are used, and (2) indicate which products they view as import-sensitive. Written submissions relating to investigation No. 332-532 should be received not later than 5:15 p.m., September 6, 2012. Written submission relating to investigation No. 332-536 should be received not later than 5:15 p.m., November 20, 2012.

Written submissions filed in connection with the respective investigations should focus on providing information of the kind described above that is relevant to the respective investigations and reports. All written submissions should be addressed to the Secretary. All written submissions must conform to the provisions of section 201.8 of the Commission's *Rules of Practice and Procedure* (19 CFR 201.8). Section 201.8 and the Commission's Handbook on Filing Procedures require that interested parties file documents electronically on or before the filing deadline and submit eight (8) true paper copies by 12:00 noon eastern time on the next business day. In the event that confidential

treatment of a document is requested, interested parties must file, at the same time as the eight paper copies, at least four (4) additional true paper copies in which the confidential information must be deleted (see the following paragraph for further information regarding confidential business information). Persons with questions regarding electronic filing should contact the Secretary (202-205-2000).

Any submissions that contain confidential business information must also conform to the requirements of section 201.6 of the Commission's *Rules of Practice and Procedure* (19 CFR 201.6). Section 201.6 of the rules requires that the cover of the document and the individual pages be clearly marked as to whether they are the "confidential" or "non-confidential" version, and that the confidential business information be clearly identified by means of brackets. All written submissions, except for confidential business information, will be made available for inspection by interested parties.

In his request letter the USTR said that it is the intent of his office to make the Commission's reports available to the public in their entirety, and asked that the Commission not include any confidential business information. Accordingly, any confidential business information received by the Commission in these investigations and used in preparing the respective reports will not be included in the reports that the Commission sends to the USTR and will not be published in a manner that would reveal the operations of the firm supplying the information.

Issued: August 8, 2012.

By order of the Commission.

Lisa R. Barton,

Acting Secretary to the Commission.

[FR Doc. 2012-19791 Filed 8-10-12; 8:45 am]

BILLING CODE 7020-02-P

INTERNATIONAL TRADE COMMISSION

[USITC SE-12-024]

Government in the Sunshine Act Meeting Notice

AGENCY HOLDING THE MEETING: United States International Trade Commission.

TIME AND DATE: August 21, 2012 at 9:30 a.m.

PLACE: Room 101, 500 E Street SW., Washington, DC 20436, Telephone: (202) 205-2000.

STATUS: Open to the public.

MATTERS TO BE CONSIDERED:

1. Agendas for future meetings: None.
2. Minutes.
3. Ratification List.
4. Vote in Inv. No. 731-TA-709 (Third Review) (Certain Seamless Carbon and Alloy Steel Standard, Line, and Pressure Pipe from Germany). The Commission is currently scheduled to transmit its determination and Commissioners' opinions to the Secretary of Commerce on or before August 30, 2012.

5. Outstanding action jackets: None.

In accordance with Commission policy, subject matter listed above, not disposed of at the scheduled meeting, may be carried over to the agenda of the following meeting.

Issued: August 8, 2012.

By order of the Commission.

William R. Bishop,

Hearings and Meetings Coordinator.

[FR Doc. 2012-19850 Filed 8-9-12; 11:15 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

Notice of Lodging of Consent Decree Pursuant to Comprehensive Environmental Response, Compensation, and Liability Act

Notice is hereby given that on August 6, 2012, a proposed Consent Decree in *United States of America v. The Gillette Company, et al.*, Civil Action No. 1:12-cv-01247-MAD-TWD, was lodged with the United States District Court for the Northern District of New York.

The proposed Consent Decree is between Plaintiff the United States of America, and the following Defendants: The Gillette Company; KeySpan Gas East Corporation (d/b/a National Grid); Energizer Battery Manufacturing, Inc.; Union Carbide Corporation; Spectrum Brands, Inc.; Brambles Environmental, Inc.; Clean Harbors Environmental Services, Inc.; Qwest Communications International, Inc.; Verizon New York, Inc.; 26 Railroad Ave., Inc.; A.P. Pharma, Inc.; Ajinomoto North America, Inc.; Allegheny Ludlum, LLC; Amresco, LLC; Arizona Chemical Company, LLC; Atmos Energy Corporation; Battery Broker Environmental Services, Inc.; Buffalo Optical Co.; Cameron International Corp.; Chemtron Corp.; City of Lakeland; City of North Tonawanda; City of Richmond; Dukane Corp.; East Side Jersey Dairy, Inc.; FirstEnergy Corp.; Glit, Division of CCP, LLC; Harding Metals, Inc.; Honeywell International, Inc.; Johnson Controls, Inc.; Los Angeles Unified School District; MDI, Inc.; Memphis Light, Gas & Water Division; Metalor Technologies

APPENDIX C
Calendar of Public Hearing

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: The Information Technology Agreement: Advice and Information on the Proposed Expansion: Part 2

Inv. No.: 332-536

Date and Time: November 8, 2012 - 9:30 a.m.

Sessions were held in connection with this investigation in the Main Hearing Room (room 101), 500 E Street, S.W., Washington, D.C.

ORGANIZATION AND WITNESS:

Motion Picture Association of America, Inc.
Washington, D.C.

Greg Frazier, Executive Vice President

Retail Industry Leaders Association
Arlington, VA

Stephanie Lester, Vice President, International Trade

Consumer Electronics Association
Arlington, VA

E. Sage Chandler, Senior Director, International Trade

Information Technology and Innovation Foundation
Washington, D.C.

Stephen Ezell, Senior Analyst

Information Technology Industry Council
Washington, D.C.

John Neuffer, Vice President, Global Policy

Semiconductor Industry Association
Washington, D.C.

Ian Steff, Vice President for Global Policy and
Technology Partnership

-END-

APPENDIX D

Positions of Interested Parties

Positions of Interested Parties

Interested parties were invited to file written submissions for the investigation. The Commission also held a public hearing for this investigation on November 8, 2012. The hearing testimony and/or written submissions are summarized below. The views expressed in the summarized materials should be considered to be those of the submitting parties and not the Commission. In preparing this summary, Commission staff did not undertake to confirm the accuracy of, or otherwise correct, the information summarized. For the full text of written submissions, see entries associated with investigation no. 332-536 at the Commission's Electronic Docket Information System, or EDIS (<https://edis.usitc.gov/edis3-internal/app>).

Best Buy¹

In a written submission, Best Buy Co., Inc. (Best Buy) stated that it is a leader in the global consumer electronics industry with more than 1,400 locations in the United States, \$50 billion in annual revenue, and the 11th-largest retail website.² Best Buy stated that it strongly supports the views expressed at the Commission's hearing in support of ITA expansion. Best Buy said that since the ITA was established, the scale and scope of ICT products has grown significantly and that the retail market for these products has grown as well.

Best Buy indicated that devices like smartphones, gaming systems, and televisions with Internet connectivity should be included in an expanded ITA, which would benefit consumers and promote production of these products. Best Buy also stated that the relevant tariff headings for these products are HS 8504, 8518, 8527, 8528, and 8544; that the major producing countries for these products are China, Malaysia, Taiwan, Thailand, and South Korea; that U.S. exports of these products are negligible; and that the leading source of U.S. imports of these products is China.

Best Buy also stated that it supports the inclusion in the ITA of audiovisual products that were developed after 1996, specifically:

- Televisions with smart applications and Internet connectivity;
- Hard drives that are able to connect to televisions for displaying videos and photograph shows;
- MP3 players that incorporate cameras or video recorders;
- Loudspeakers that incorporate innovative wireless features;
- Headphones that incorporate innovative wireless features;
- Video recorders; and
- Other smart products that incorporate Internet connection via Wi-Fi or local area network (LAN).

Best Buy noted that inclusion of these goods would remove a barrier to free trade, enable accessibility to markets, promote job creation, and facilitate use and innovation. Best Buy

¹ Best Buy, written submission to the USITC, November 20, 2012.

² Among U.S. and Canadian companies. Internet Retailer website. <http://www.internetretailer.com/top500/list> (accessed January 23, 2013).

added that the goods contained in the proposed ITA expansion list provided by the USTR are not import sensitive.

Consumer Electronics Association³

In a written submission and in hearing testimony, the Consumer Electronics Association (CEA) stated that it provides advocacy and other services for the \$206 billion U.S. consumer electronics industry. CEA stated that it supports the expansion of the ITA, particularly with respect to three product areas: TVs and monitors, computers and video games, and audio/video devices.

CEA stated that it supports the inclusion of all flat panel TV screens classified under HS 8528, and explained that consumer demand for these products is substantial, particularly for TVs of a size over 40 inches. CEA provided detailed statistics that show the growing market for televisions with Internet connectivity and Internet TV applications. CEA also stated that a variety of computer and video game products should be included in an expanded ITA, including:

- All entertainment software (classified under HS heading 8523);
- All video game consoles and parts and accessories thereof (classified under HS subheading 9504.50 in the 2012 HS nomenclature);
- Documents of title (classified as an ex-out under HS subheading 4907.00);
- Coded key cards, stored value cards, and point of sale activation cards, or licenses to use software that are not documents of title (classified under HS subheadings 4911.10 and 4911.99); and
- Coin-operated games (classified under HS subheading 9504.30).

CEA explained that technologies in these areas are growing and converging with other ICT technologies. CEA further stated that it was illogical for console games and accessories to receive different duty treatment than the same games and accessories designed for PCs. CEA also said that it supports the removal of tariffs on audio and video devices under HS codes 8518, 8521, and 8527 through inclusion in an expanded ITA. CEA described the ways in which audio and video devices are becoming linked with other ITA devices and stated that it supports the removal of tariffs on all of these products.

Consumer Electronics Retailers Coalition⁴

In a written submission, the Consumer Electronics Retailers Coalition (CERC) stated that it is a public policy organization of major U.S.-based retailers of electronics products. It said that CERC comprises major U.S. retailers, including Amazon.com, Best Buy, RadioShack, Sears Holdings, Target, and Walmart, as well as the leading retail trade associations—the Retail Industry Leaders Association (RILA) and the National Retail Federation (NRF). CERC stated that it supports recent WTO and USTR efforts to expand the ITA, and indicated that it is supported in this position by its major vendors and associated partners. CERC commented that the number of ICT products has increased significantly since the initial implementation of the ITA and that this growth has been fueled largely

³ USITC, hearing transcript, November 8, 2012; CEA, written submission to the USITC, November 20, 2012.

⁴ CERC, written submission to the USITC, November 20, 2012.

by non-import-sensitive ICT products. CERC added that updating the ITA will result in job creation in the retail field as well as in information technology development, advanced semiconductors, and technical support jobs.

CERC expressed support for including several products in an expanded ITA, specifically products popular with consumers, such as smartphones, gaming systems, and televisions with Internet connectivity. CERC also urged the inclusion of all advanced connected video products listed under HS heading 8528. It said that televisions under 24 inches, which are currently the only televisions that are included in the ITA, represent a declining portion of the market for all televisions with advanced connection capacity, and that continuing this 24-inch limitation would hurt consumers. CERC supports the inclusion of other “connected devices” and their components, including speakers, semiconductors, headphones, and camcorders, in an expanded ITA.

CERC also supports the view held by the U.S. technology industry that the proposed products are generally not import sensitive. CERC noted that at the Commission hearing, it was established that there are no orders or investigations pertaining to the products under consideration, that only one witness made mention of the issue of import sensitivity, and that no witness testified on behalf of a concerned entity.

Entertainment Software Association⁵

In a written submission, the Entertainment Software Association (ESA) provided background on the entertainment software industry and its contributions to the U.S. economy. ESA cited industry statistics showing a dynamic and growing market for video games, consoles, and accessories. ESA also stressed that video games are increasingly used for educational purposes.

ESA said that in its September 6, 2012, submission, it had expressed support for the inclusion of the following products in the ITA:

- All entertainment software (classified under HS heading 8523);
- Video game consoles, and parts and accessories thereof (classified under HS subheading 9504.50 in 2012 nomenclature);
- Documents of title (classified as an ex-out under HS subheading 4907.00);
- Coded key cards, stored value cards, and point of sale activation cards, or licenses to use software that are not in documents of title (classified under HS subheadings 4911.10 and 4911.99); and
- Coin-operated games (classified under HS subheading 9504.30).

In its November 20, 2012, filing, ESA added the following items that it also supports for inclusion in an expanded ITA:

- Cordless infrared remote control devices (classified under HS heading 8543); and
- Radio remote control apparatus (classified under HS subheading 8526.92).

ESA also stated that it strongly supports lowering bound tariff rates to promote trade in video game console parts and accessories and to increase global sales. In addition, ESA suggested that the 2012 HS nomenclature be used to reference ITA products in the future to provide flexibility for future technology, help promote consistent tariff classification,

⁵ ESA, written submission to the USITC, November 20, 2012.

and increase certainty and predictability regarding classification and duty liability. ESA proposed that more attention be paid to protecting the “gaming ecosystem” as well, particularly by including activation and value cards in an expanded ITA.

Hewlett Packard⁶

In a written submission, the Hewlett-Packard Company (HP) stated that it is the world’s largest provider of information technology infrastructure, software, services, and solutions to individuals and organizations of all sizes. HP noted that it employs more than 80,000 people in the United States and operates in 170 countries. HP said that products that are in, or should be covered by, the ITA make up a large source of the company’s revenue.

HP stated that it strongly supports expansion of the ITA, particularly for the following products, none of which it considers import sensitive:

- All ink and toner cartridges (classified under HS headings 3215 and 3707);
- Bulk ink and toner for use in digital products (classified under HS headings 3215 and 3707);
- Flat panel displays (classified under HS subheading 8528.59);
- Large format/graphics printers (classified under HS subheading 8443.32); and
- Laptop batteries (classified under HS heading 8507).

HP asserted that there has been inconsistent tariff treatment for these products, depending on the country.

Information Technology Industry Council⁷

In a written submission and in hearing testimony, the Information Technology Industry Council (ITI) stressed the importance of the ITA and stated that the agreement should be expanded to account for recent innovations and growth in the ICT industry. ITI stated that it comprises 49 of the world’s leading innovation companies in the technology arena.

ITI stated that since the ITA was signed in 1996, it has already benefited the high-tech industry by promoting trade, encouraging economic growth, increasing employment, promoting investment, and encouraging innovation. ITI characterized the ITA as vital to facilitating global trade because it lowers customs tariffs on critical ICT goods such as computers, keyboards, hard drives, semiconductors, and semiconductor manufacturing equipment. ITI added that while ICT innovation continues at a rapid pace, not all of it is captured in the current ITA, and it supports product expansion, particularly in the areas of audio and visual communications technologies, video game consoles, and entertainment software. ITI also commented that the ITA should be expanded in the following areas:

- Global Positioning Satellite (GPS) systems;
- Innovations in semiconductors, including multi-component semiconductors (MCOs);
- Methods of semiconductor production, including lasers;

⁶ HP, written submission to the USITC, November 20, 2012.

⁷ USITC, hearing transcript, November 8, 2012; ITI, written submission to the USITC, November 20, 2012.

- Office equipment;
- Scientific, medical, and analytical instruments;
- Manufacturing equipment and materials;
- Digital inks;
- Money-changing machines;
- Lithium-ion batteries; and
- ICT parts, components, and accessories.

ITI detailed recent progress in the area of ITA expansion, including a 2012 WTO symposium, an endorsement of ITA expansion by B20 business leaders, and the development of an initial “Consolidated Products List” that identifies specific products that should be included in an expanded ITA. ITI also stated that a broad industry coalition from over 28 countries and including over 60 industry associations supports expansion of the ITA. ITI proposed that the ITA be expanded not only by scope of included products, but also geographically to include more countries, and urged U.S. negotiators to move forward on both fronts in order to “expand trade, stimulate growth, increase jobs, spur innovation, and promote prosperity around the world.”⁸

Information Technology and Innovation Foundation⁹

In a written submission and in hearing testimony, the Information Technology and Innovation Foundation (ITIF) said that it is a technology and economic policy think tank and declared that the ITA has been one of the most successful trade initiatives ever launched. ITIF stated that it strongly supports expansion of the ITA to keep pace with recent innovations in ICT-related products, particularly in the areas of GPS systems, flat panel displays, video game consoles, and semiconductor chips. ITIF also requested inclusion of older technologies, including dynamic random-access memory chips, audio speakers, DVD players, and video cameras. ITIF estimated that expansion for these goods could generate an additional \$800 billion in two-way trade for U.S. industries.

ITIF noted that ITA expansion would be beneficial both for the United States and for developing countries. For the United States, the ITIF listed four ways in which ITA expansion would be beneficial: (1) foreign tariff removal on an expanded set of ICT products would boost U.S. exports of ICT goods and create U.S. jobs; (2) a stronger ITA would expand the global ICT marketplace, in turn strengthening the U.S. ICT industry; (3) U.S. consumers would benefit from the lower prices realized from full tariff removal on an expanded range of ICT products; and (4) U.S. leadership in promoting ITA product expansion would further bolster the U.S. position as a leading advocate of greater global multilateral trade liberalization.

For developing countries, ITIF listed three ways in which ITA expansion would be beneficial: (1) tariff reductions would decrease the cost of ICT goods and encourage the wider consumption and adoption of ICT products that spur innovation and economic growth; (2) lower prices on ICT goods would encourage greater ICT uptake and boost the productivity of all other ICT-consuming industries; and (3) lower prices on ICT goods could support development of the software and services industries. ITIF added that ITA

⁸ USITC, hearing transcript, November 8, 2012; ITI, written submission to the USITC, November 20, 2012, 10.

⁹ USITC, hearing transcript, November 8, 2012; ITIF, written submission to the USITC, November 20, 2012.

expansion benefits the entire global economy by boosting productivity and incomes through the increase of global ICT capital stock.

Motion Picture Association of America¹⁰

In a written submission and in hearing testimony, the Motion Picture Association of America (MPAA) noted the global nature of the U.S. film industry and stated that it strongly supports the expansion of the ITA. First, MPAA stated that it supports the expansion because the U.S. film industry is highly dependent upon exports to other countries for revenue. The MPAA said that growth in overseas markets has been phenomenal and that the ITA would continue to facilitate these exports. Second, the MPAA explained that it supports expansion because the film industry depends upon developing technologies such as digital film, which were not in existence when the ITA was first created. The MPAA provided supporting statistics for both of these claims and listed the following HS subheadings covering discs, tapes, and other media for recording, which it strongly supports for inclusion in an expanded ITA: 8523.29, 8523.40, 8523.51, 8523.54, and 8523.80.

National Electrical Manufacturers Association¹¹

In a written submission, the National Electrical Manufacturers Association (NEMA) stated that it is an association of electrical equipment manufacturers with member companies that manufacture power transmission and distribution equipment, lighting systems, factory automation and control systems, and medical diagnostic imaging systems. NEMA indicated that it generally favors reciprocal elimination of customs tariffs within the scope of its association and that it supports expansion of the ITA. NEMA further stated that the ITA's tariff elimination provisions would provide U.S. exporters with an advantage over competitors who are not ITA members.

NEMA commented on issues relating to products that it supports for inclusion in an expanded ITA. These products include power equipment, lighting systems, factory control systems, and medical equipment, encompassing 36 HS subheadings. NEMA provided information regarding key export markets, major producing countries, and information about relevant ICT and non-ICT uses.

Retail Industry Leaders Association¹²

In a written submission and in hearing testimony, the Retail Industry Leaders Association (RILA) stated that it is a trade association of the world's largest and most innovative retail companies, representing more than 200 retailers, product manufacturers, and service suppliers with more than \$1.5 trillion in annual sales and more than 100,000 stores and facilities around the world. RILA supports an expansion of product coverage as well as growth in membership of the ITA, because RILA's members are heavy users of ICT products, which help RILA members track and move products and conduct business around the world.

¹⁰ USITC, hearing transcript, November 8, 2012; MPAA, written submission to the USITC, November 8, 2012.

¹¹ NEMA, written submission to the USITC, November, 26, 2012.

¹² USITC, hearing transcript, November 8, 2012; RILA, written submission to the USITC, November 20, 2012.

RILA stated that U.S. retailers would benefit from an expanded ITA because products such as smartphones, music players, gaming systems, and televisions with Internet connectivity have increased in popularity. RILA also stated that products such as high-definition multimedia interface cables, chargers, semiconductors, inks, headphones, radios, and speakers are important to retailers for ITA coverage because they are used in daily operations. RILA explained that inclusion of these products in an expanded ITA would make them more affordable, encourage competition, promote production, and lower prices for both retailers and consumers.

RILA stated that it particularly supports the inclusion of all flat panel screens (televisions and computer monitors) classified under HS heading 8528 in an expanded ITA. RILA highlighted the growth of various uses of flat panel screens in modern communication and emphasized that all screens should be included regardless of size. RILA also supports the inclusion of a variety of other products, particularly those cited in the September 6, 2012, submission to the USITC by the U.S. Technology Industry. RILA stated that the expanded ITA should recognize the growth of multifunctionality and technology convergence in modern products and asserted that a broadened ITA would allow for more business certainty and more innovation.

Semiconductor Industry Association¹³

In a written submission and in hearing testimony, the Semiconductor Industry Association (SIA) stated that it strongly supports the expansion of the ITA to include duty-free treatment for information technology products. SIA stated that semiconductors represent one of the United States' largest export industries and that semiconductor chips are used in a wide variety of products. SIA noted that the U.S. semiconductor industry positively contributes to exports, employment, and economic growth in general. SIA indicated that U.S. exports of ICT products have more than tripled since the agreement began in 1996 and that a WTO study showed that semiconductors were the largest IT product category in the ITA, accounting for 33 percent of global exports of IT products in 2010.¹⁴ SIA urged that the ITA be expanded to include new technological innovations, particularly multi-component integrated circuits (MCOs) and multi-chip packages (MCPs), two recent semiconductor innovations. SIA also indicated that it supports a broad expansion of the ITA so that consumers can benefit from a wide variety of products in the ICT ecosystem. Moreover, SIA stated that ITA product coverage should be expanded because doing so would allow more certainty as the ICT industry continues to expand.

SIA also detailed the challenges surrounding the classification of MCOs and MCPs under existing HS classification codes. SIA indicated that MCOs, as an evolution in semiconductor technology, should receive the same duty-free treatment under the ITA as all other semiconductor technologies, but that they have been erroneously excluded from ITA coverage because many countries classify MCOs as parts of end-use products rather than semiconductor devices. Regarding MCPs, SIA recommended that they be included under existing provisions in HS heading 8542 and that their parts be included under HS subheading 8542.90.

¹³ USITC, hearing transcript, November 8, 2012; SIA, written submission to the USITC, November 20, 2012.

¹⁴ SIA, written submission to the USITC, November 20, 2012, 1.

APPENDIX E
List of ITA Participants

TABLE E.1 List of ITA participants, 2012

Country	Year Entered ITA
Albania	1999
Australia	1997
Austria	1997
Bahrain	2003
Belgium	1997
Bulgaria	2007
Canada	1997
China	2003
Colombia	2012
Costa Rica	1997
Croatia	1999
Cyprus	2000
Czech Republic	1997
Denmark	1997
Dominican Republic	2006
Egypt	2003
El Salvador	1997
Estonia	1997
Finland	1997
France	1997
Georgia	1999
Germany	1997
Greece	1997
Guatemala	2005
Honduras	2005
Hong Kong, China	1997
Hungary	2004
Iceland	1997
India	1997
Indonesia	1997
Ireland	1997
Israel	1997
Italy	1997
Japan	1997
Jordan	1999
Korea, Republic of	1997
Kuwait	2010

TABLE E.1—Continued

Country	Year Entered ITA
Kyrgyz Republic	1999
Latvia	1999
Lithuania	1999
Luxembourg	1997
Macao, China	1997
Malaysia	1997
Malta	2004
Mauritius	1999
Moldova	2001
Morocco	2003
Netherlands	1997
New Zealand	1997
Nicaragua	2005
Norway	1997
Oman	2000
Panama	1998
Peru	2008
Philippines	1997
Poland	1997
Portugal	1997
Romania	1997
Saudi Arabia	2005
Singapore	1997
Slovak Republic	1997
Slovenia	2000
Spain	1997
Sweden	1997
Switzerland ^a	1997
Taiwan (Chinese Taipei)	1997
Thailand	1997
Turkey	1996
Ukraine	2008
United Arab Emirates	2007
United Kingdom	1997
United States	1997
Vietnam	2006

Source: WTO, "15 Years of the Information Technology Agreement," May 2012, 107.

Note: European Union members listed separately.

^a Switzerland includes Liechtenstein.