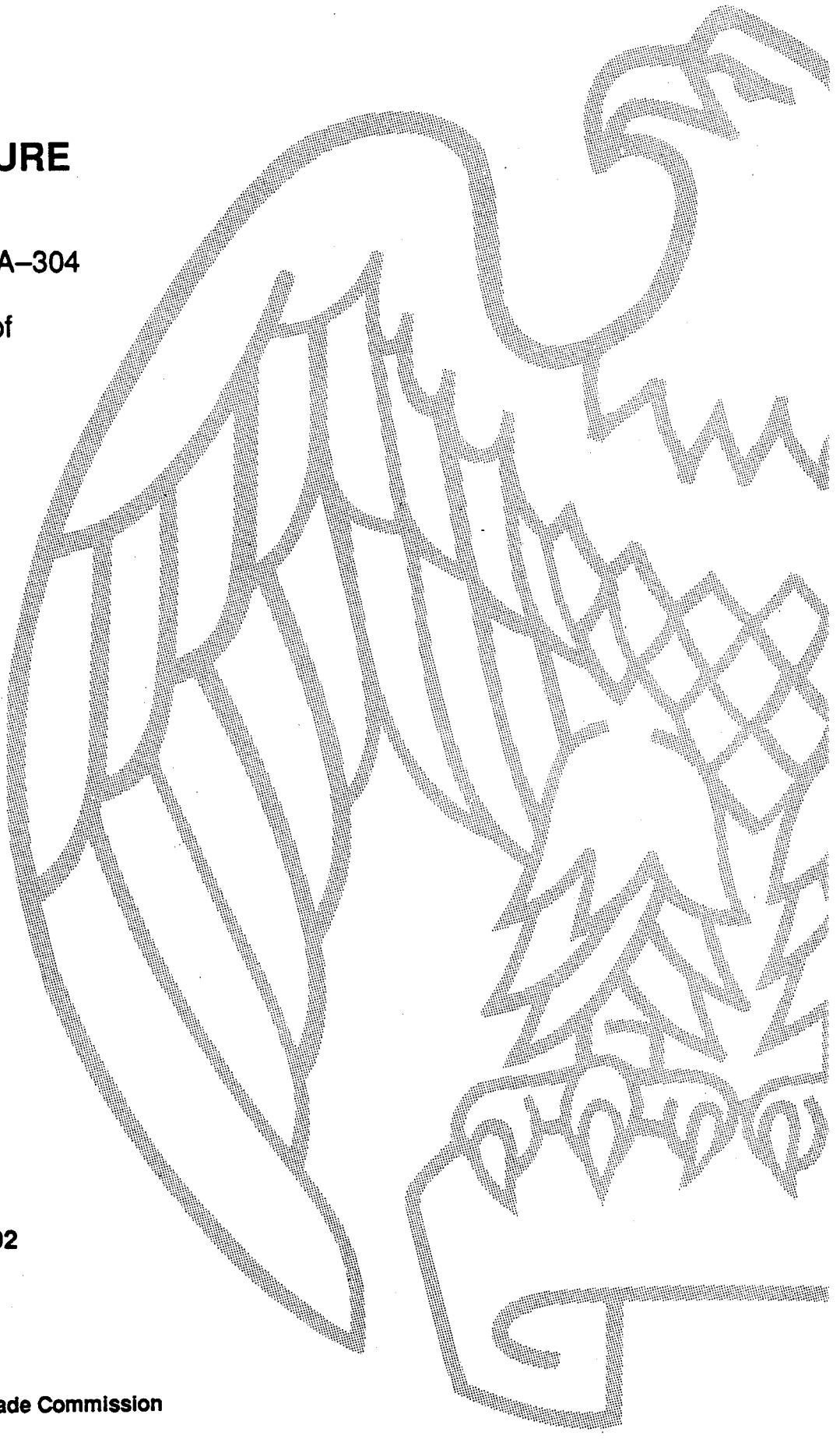
In the Matter of

CERTAIN PRESSURE TRANSMITTERS

Investigation No. 337–TA–304
Temporary Relief
(Commission Decision of
March 19, 1990)



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United States International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION

COMMISSIONERS

Anne E. Brunsdale, Acting Chairman
Seeley G. Lodwick
David B. Rohr
Don E. Newquist

Address all communications to
Kenneth R. Mason, Secretary to the Commission
United States International Trade Commission
Washington, DC 20436

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	
CERTAIN PRESSURE TRANSMITTERS	Inv. No. 337-TA-304

NOTICE OF COMMISSION DECISION TO DENY MOTION FOR TEMPORARY RELIEF

AGENCY: U.S. International Trade Commission

ACTION: Notice

SUMMARY: Notice is hereby given that the U.S. International Trade Commission has determined to deny the complainant's motion for temporary relief and vacate-in-part the presiding administrative law judge's (ALJ's) initial determination (ID) on temporary relief. The Commission adopted the findings of fact contained in the ID and the analysis on the issue of patent validity. The remainder of the ID was vacated.

ADDRESS: Copies of the nonconfidential version of the ID and all other nonconfidential documents filed in connection with this investigation are available for inspection during official business hours (8:45 a.m. to 5:15 p.m.) in the Office of the Secretary, U.S. International Trade Commission, 500 E Street SW., Washington, DC 20436, telephone 202-252-1000.

FOR FURTHER INFORMATION CONTACT: Jean Jackson, Esq., Office of the General Counsel, U.S. International Trade Commission, telephone 202-252-1104. Hearing-impaired individuals are advised that information on this matter can be obtained by contacting the Commission's TDD terminal on 202-252-1810.

SUPPLEMENTARY INFORMATION: On September 15, 1989, Rosemount, Inc. (Rosemount) filed a complaint and a motion for temporary relief with the Commission alleging violations of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) in the importation and sale of certain pressure transmitters covered by claims 1-4 of U.S. Letters Patent 3,800,413, owned by Rosemount. Pressure transmitters are devices use to measure flow rates in industrial processes.

Pursuant to Commission interim rule 210.24(e)(8)(19 C.F.R. § 210.24(e)(8)), the Commission provisionally accepted Rosemount's motion for temporary relief at the Commission meeting on October 15, 1989. The Commission also instituted an investigation of Rosemount's complaint. A notice of investigation was published in the Federal Register on October 20, 1989. 54 Fed. Reg. 43145. The notice named SMAR Equipment of Sao Paulo, Brazil and SMAR International of Ronkonkoma, New York as respondents.

The presiding ALJ held an evidentiary hearing from November 27-November 30, 1989. Respondents actively participated in the hearing. On December 19, 1989 all parties filed written submissions on the issues of remedy, the public interest, and respondents' bond, as provided for in Commission interim rule 210.24(e)(18)(ii) (19 C.F.R. § 210.24(e)(18)(ii)).

On December 29, 1989, the ALJ issued an ID granting Rosemount's motion for temporary relief. On January 8, 1990, all parties filed written comments concerning the ID as provided for by Commission interim rule 210.24(e)(17)(iii)(19 C.F.R. § 210.24(e)(17)(iii)). Responses to the comments were filed on January 11, 1990. No government agency comments were filed. On January 17, 1990, the Commission designated the temporary relief proceedings more complicated, thereby extending the deadline for completion of the temporary relief proceedings until March 19, 1990. 54 Fed. Reg. 2422-3 (Jan. 24, 1990). The Commission also requested submissions from interested person addressing certain questions relating to the standard to be applied in temporary relief proceedings. Id. On February 16, 1990, the Commission received submissions from the parties, the American Intellectual Property Association, the ITC Trial Lawyers Association, and Motorola, Inc.

This action is taken under authority of section 337 of the Tariff Act of 1930 (19 U.S.C. § 1337) and section 210.24(e)(17)(ii) of the Commission's interim rules (19 § 210.24(e)(17)(ii)).

By order of the Commission.

Kenneth R. Mason
Secretary

Issued: March 19, 1990

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of CERTAIN PRESSURE TRANSMITTERS	Investigation No. 337-TA-304 (Temporary Relief Proceedings)

ORDER

It is hereby ORDERED that --

1. Complainant's motion for temporary relief is denied;

2. The initial determination of the presiding administrative law judge (ALJ) on temporary relief is vacated except for the ALJ's findings of fact and the ALJ's analysis of the issue of patent validity.

3. The Secretary shall serve copies of this Order and the Commission Opinion to be issued in support thereof on each party of record to this investigation and on the Department of Health and Human Services, the Department of Justice, the Federal Trade Commission, and the Secretary of the Treasury, and publish notice thereof in the Federal Register.

By order of the Commission.

Kenneth R. Mason
Secretary

Issued: March 19, 1990

CERTIFICATE OF SERVICE

I, Kenneth R. Mason, hereby certify that the attached NOTICE OF COMMISSION DECISION TO DENY MOTION FOR TEMPORARY RELIEF, was served upon Deborah J. Kline, Esq., and upon the following parties via first class mail, and air mail where necessary, on March 20, 1990.

Kenneth R. Mason

Kenneth R. Mason, Secretary
U.S. Interntional Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

For Complainant Rosemount Inc.:

John F. Flannery, Esq.
R. Steven Pinkstaff, Esq.
FITCH, EVEN, TABIN & FLANNERY
135 South LaSalle Street
Chicago, Illinois 60603-4277

Nickolas E. Westman, Esq.
KINNEY & LANGE, P.A.
Suite 1500
625 Fourth Avenue South
Minneapolis, Minnesota 55415

Paul Plaia, Jr., Esq.
Cecilia H. Gonzalez, Esq.
HOWREY & SIMON
1730 Pennsylvania Avenue, N.W.
Washington, D.C. 20006-4793

For Respondents SMAR Equipment and SMAR International Corporation:

Larry Klayman, Esq.
Leo Aubel, Esq.
KLAYMAN & ASSOCIATES, P.C.
501 School Street, S.W.
Suite 700
Washington, D.C. 20024

PUBLIC MAILING LIST

Jeff Jaksa
Mead Data Central (LEXIS)
Suite 900
80 F Street, N.W.
Washington, D.C. 20036

Robert S. Lundquist
Inventory Control, Floor 6E
West Publishing Company
50 West Kellogg Boulevard
P. O. Box 64526
St. Paul, Minnesota 55164-0526

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UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	)	
	)	Inv. No. 337-TA-304
CERTAIN PRESSURE TRANSMITTERS	)	(Temporary Relief Proceedings)
	)	

COMMISSION OPINION

I. PROCEDURAL HISTORY

On September 15, 1989, Rosemount Inc. filed a complaint and a motion for temporary relief with the Commission alleging violations of section 337 in the importation and sale of certain pressure transmitters, which are devices used to measure the rate of fluid flow in pipelines. Rosemount alleged that the pressure transmitters at issue were made abroad by means of a process covered by claims 1, 2, 3, and 4 of U.S. Letters Patent 3,800,413 (the '413 patent), owned by Rosemount.

Pursuant to Commission interim rule 210.24(e)(8), the Commission provisionally accepted Rosemount's motion for temporary relief at the Commission meeting on October 17, 1989. The Commission also instituted an investigation of Rosemount's complaint. A notice of investigation was published in the Federal Register on October 20, 1989. 54 Fed. Reg. 43145.

The notice named SMAR Equipment of Sao Paulo, Brazil, and SMAR International of Ronkonkoma, New York as respondents.

The presiding administrative law judge (ALJ) held an evidentiary hearing from November 27 through November 30, 1989. Respondents actively participated in the hearing. Sixty days after institution, on December 19, 1989, all parties filed written submissions on the issues of remedy, the public interest, and respondents' bond in accordance with interim rule 210.24(e)(18)(ii). On December 29, 1989, the ALJ issued her initial determination (ID) granting Rosemount's motion for temporary relief. [1] On January 8, 1990, all parties filed written comments on the ID, as provided for by interim rule 210.24(e)(17)(iii). On January 11, 1990, all parties filed responses to the comments. No government agency comments were received.

On January 17, 1990, the Commission designated the temporary relief phase of the investigation "more complicated" because of the complex issues raised by the ID concerning the appropriate standards to be used in temporary relief proceedings. [2] On March 19, 1990, the Commission terminated the temporary

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[1] Under Commission interim rule 210.24(e)(17)(i) (19 C.F.R. § 210.24(e)(17)(i)), on the 70th day (120th day in a "more complicated" investigation) after publication of the notice of investigation, the ALJ must issue an ID on temporary relief. The ID must address the issues of violation, the effect that relief will have on the public interest, whether the complainant should be required to post a bond, and, if so, the amount of the bond.

[2] The Federal Register notice designating the investigation "more complicated" requested submissions from interested persons, including the parties, on the issues of:

1. Whether, in view of the 1988 amendments to 19 U.S.C. § 1337(e), the Commission should apply a standard of "irreparable" to complainant's harm even though the

(continued...)

relief proceedings and determined to deny Rosemount's motion for temporary relief. The Commission adopted the findings of fact made in the ID and the ID's analysis on the issue of validity of the '413 patent. The rest of the ID was vacated.

II. JURISDICTION

The Commission's in personam jurisdiction over this investigation is based on the appearances of all parties. The Commission has subject matter jurisdiction over this investigation because the unfair acts and unfair methods of competition involve importation and sale in the United States of the accused pressure transmitters. [3]

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[2](...continued)

legislative history of the 1988 amendments states that Congress intended to codify former Commission practice, which was to apply a standard of "immediate and substantial" in assessing complainant's harm.

2. What factual showing is necessary to overcome a rebuttable presumption of irreparable harm to complainant based on a clear showing of validity and infringement in a patent-based case.

3. The weight the Commission should give to the public interest in protecting patent rights in relation to the public interest factors specifically listed in 19 U.S.C. § 1337(e) in light of Bristol-Myers v. U.S. International Trade Commission, unpublished opinion 89-1530 (Fed. Cir. Dec. 8, 1989).

55 Fed. Reg. 2422-3 (Jan. 24, 1990).

Submissions were filed on February 16, 1990 by the parties, and by the ITC Trial Lawyers Association (ITCTLA), the American Intellectual Property Law Association (AIPLA), and Motorola, Inc. (Motorola).

[3] Rosemount Exh. 7.

III. STANDARD TO BE APPLIED IN ISSUING TEMPORARY RELIEF

The Commission's authority for issuing temporary relief is found in section 337(e), which provides in pertinent part:

> (1) If, during the period of an investigation under this section, the Commission determines that there is reason to believe that there is a violation of this section, it may direct that the articles concerned, imported by any person with respect to whom there is reason to believe that such person is violating this section, be excluded from entry into the United States, unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States and United States consumers, it finds that such article should not be excluded from entry. . . .
>
> (2) A complainant may petition the Commission for the issuance of an order under this subsection. The Commission shall make a determination with regard to such petition by no later than the 90th day after the date on which the Commission's notice of investigation is published in the Federal Register. The Commission may extend the 90-day period for an additional 60 days in a case it designates as a more complicated case. The Commission may require the complainant to post a bond as a prerequisite to the issuance of an order under this subsection.
>
> (3) The Commission may grant preliminary relief under this subsection or subsection (f) of this section to the same extent as preliminary injunctions and temporary restraining orders may be granted under the Federal Rules of Civil Procedure.

Subsection (e)(1) was added to the statute in its present form by the Trade Act of 1974, but its substance can be traced back to section 316(f) of the Fordney-McCumber Tariff Act of 1922. Subsections (e)(2) and (e)(3) were added by the Omnibus Trade and Competitiveness Act of 1988 (the OTCA). The legislative history of the OTCA indicates that subsection (e)(2) was added to section 337 because Congress felt temporary relief in the Commission was

sometimes provided too late to benefit complainants. [4] New subsection 337(e)(3) raises the question of whether the Commission should change its temporary relief practice to conform more closely to the preliminary injunction practice of the federal courts. In this opinion we set forth our understanding of federal court preliminary injunction practice and examine whether Commission practice should be modified in view of subsection 337(e)(3).

A. Federal Court Practice

The U.S. Court of Appeals for the Federal Circuit (Federal Circuit), the Commission's court of review for section 337 cases, has exclusive jurisdiction of appeals from all federal district court grants or denials of motions for preliminary injunctions in patent infringement cases. [5] Thus, the federal court standard for granting or denying preliminary injunctions in patent cases is that of the Federal Circuit. [6]

In Smith International, Inc. v. Hughes Tool Co., 718 F.2d 1573 (Fed. Cir. 1983), the Federal Circuit set forth the standard for the issuance of a preliminary injunction in patent cases. Under Smith, before a preliminary

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[4] S. Rep. No. 71, 100th Cong., 1st Sess. 131 (1987); H.R. Rep. No. 40, 100th Cong., 1st Sess., pt. 1, at 159 (1987).

[5] 28 U.S.C. § 1292(a)(1), (c)(1).

[6] The legislative history of the OTCA specifically notes the preliminary injunction standard articulated in Smith International Inc. v. Hughes Tool Co., 718 F.2d 1573 (Fed. Cir. 1983). S. Rep. No. 71, 100th Cong., 1st Sess. 131 (1987); H.R. Rep. No. 40, 100th Cong., 1st Sess. 159 (1987).

injunction can issue, the movant must meet two requirements. The first is a probability of success on the merits of its claim. [7] With respect to that requirement, the Federal Circuit has held several times that, in order to prevail, the movant's probability of success must rise to the level of a reasonable likelihood of success. [8] Moreover, the Federal Circuit has held that if an accused infringer chooses not to challenge validity and so fails to carry its burden to show that the patent is invalid, the court must treat the movant's probability of success on the issue of validity as having been established. [9]

Under Smith International and its successors, movant must demonstrate second that he will suffer immediate irreparable harm if the preliminary relief is not granted. [10] Movant may demonstrate irreparable harm either by an affirmative factual showing, [11] or by making the showings necessary to raise a presumption of irreparable harm. Irreparable harm is presumed where validity and continuing infringement have been clearly established. [12] In order to warrant a presumption of irreparable harm, the showing of likelihood

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7 Smith International, 718 F.2d at 1578.

8 Roper Corp. v. Litton Systems, Inc., 757 F.2d 1266, 1271 (Fed. Cir. 1985); H.H. Robertson Co. v. United Steel Deck, Inc., 820 F.2d 384, 388 (Fed. Cir. 1987); T.J. Smith and Nephew Limited v. Consolidated Medical Equipment, 821 F.2d 646, 647 (1987).

9 Roper, 757 F.2d at 1270 (Fed. Cir. 1985).

10 Smith International, 718 F. 2d at 1578-1579. See also, Roper, 757 F.2d at 1271; T.J. Smith, 821 F.2d at 647; Hybritech v. Abbott Laboratories, 849 F.2d 1446, 1456 (Fed. Cir. 1988).

11 See e.g., Hybritech Inc. v. Abbott Laboratories, 849 F.2d at 1456-1457.

12 Smith International, 718 F.2d at 1581.

of success on validity and infringement must be "not merely a reasonable but a strong showing indeed." Roper Corp. v. Litton Systems, Inc., 757 F.2d 1266, 1271 (Fed. Cir. 1985). [13]

In Smith International, the court explained the use of a presumption by stating that "[t]he very nature of the patent right is the right to exclude others. Once the patentee's patents have been held to be valid and infringed, he should be entitled to the full enjoyment and protection of his patent rights." [14] The Federal Circuit further explained in H.H. Robertson Co. v. United Stee. Deck, Inc, 820 F.2d 384, 390 (Fed. Cir. 1987), that the presumption of irreparable harm derives in part from the finite term of the patent grant, for patent expiration is not suspended during litigation, and the passage of time can work irremediable harm. In Roper, 757 F.2d at 1272, the court held that a presumption of irreparable harm based on a clear showing of validity and infringement is rebuttable by clear evidence that irreparable injury would not actually be suffered by the patentee if the motion for preliminary injunction were denied.

Federal courts have considered the following factors, inter alia, relevant, either in finding that a presumption of irreparable harm has been

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[13] In Atlas Powder Company v. Ireco Chemicals, 773 F.2d 1230, 1233 (Fed. Cir. 1985), the Federal Circuit held that prior adjudications or admissions of validity and infringement, as were present in Smith International, are not prerequisites to demonstrating the clear showing needed to support a presumption of irreparable harm.

[14] Smith International, 718 F.2d at 1581. The patent at issue in Smith International had previously been adjudicated not invalid in another infringement action. Id. at 1579. Moreover, the accused infringer had admitted infringement. Id. at 1579-1580.

rebutted or in assessing, upon a factual showing, whether a patentee would be irreparably harmed in the absence of temporary relief:

1. Whether the patent owner has delayed in bringing action against the accused infringer. [15]

2. Whether the patent owner has granted licenses. The grant of licenses has been held incompatible with the emphasis on the right to exclude. [16]

3. Whether the accused infringer has stopped infringing. [17]

4. Whether the denial of a preliminary injunction would have a negative effect on the patent owner's market share. [18]

5. Whether, in the absence of preliminary relief, other potential infringers will be encouraged to infringe. [19]

6. Whether the patent involves rapidly changing technology and a short life cycle product, so that the patent may not be of value when the litigation is finished. [20]

7. Whether the potential injury to the patent owner is unpredictable. [21]

In addition, Atlas Powder Company v. Ireco Chemicals, 773 F.2d 1230, 1233 (Fed. Cir. 1985), rejected the infringer's argument that the patentee's injury was not irreparable because infringement and related damages would be fully compensable in money. In the court's view, this argument improperly downplays

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15 T.J. Smith, 821 F.2d. at 648.

16 Id.

17 Roper, 757 F.2d at 1272.

18 Lubrizol Corp. v. Exxon Corp., 7 USPQ2d 1513, 1528 (N.D. Ohio 1988).

19 Hybritech, 849 F.2d at 1456.

20 Id.

21 Id.

the nature of the statutory patent right to exclude others from making, using, or selling the patented invention throughout the United States. [22] The Federal Circuit noted that, while monetary relief is often the sole remedy for past infringement, it does not follow that money damages are also the sole remedy against future infringement. [23]

Although Smith International held that the court should take into account, when relevant, the possibility of harm to other interested persons from the grant or denial of the injunction and the public interest, [24] the Federal Circuit has not found it necessary to consider these equitable factors if the movant fails to establish that it will suffer irreparable harm in the absence of relief. [25] On the other hand, the Federal Circuit has held that even when irreparable injury is presumed and not rebutted, it is still necessary to consider the balance of hardships between the parties before an injunction may be issued. [26] A finding that the balance of harm tips in favor of the party seeking preliminary injunctive relief is not a prerequisite to issuance of preliminary relief, however, but rather is one factor to be considered along with the public interest. [27] Finally, although there

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22 Atlas Powder, 773 F.2d at 1233.

23 Id.

24 Smith International, 718 F.2d at 1579.

25 Roper, 757 F.2d at 1271-1273 (where the presumption of irreparable harm is rebutted, the question of infringement need not be decided and consideration of the balance of equities or the public interest cannot supplant the deficiency).

26 H.H. Robertson, 820 F.2d at 390.

27 Hybritech, 849 F.2d at 1457-1458.

typically exists a public interest in protecting rights secured by valid patents, the Federal Circuit has held that the focus of the district court's public interest analysis should be on whether there exists some critical public interest that would be injured by the grant of preliminary relief. [28]

B. Commission Practice

In temporary relief proceedings, the Commission has, in the past, first determined whether there is a reason to believe that section 337 has been violated. After making this determination, the Commission then considered whether temporary relief should be granted in light of the following four factors:

(1) complainant's likelihood of success on the merits,

(2) immediate and substantial harm to the domestic industry in the absence of relief,

(3) harm, if any, to the respondents if temporary relief is granted, and

(4) the effect, if any, that the issuance of temporary relief would have on the public interest. [29]

If the Commission determined that the complainant was entitled to temporary relief in light of the four listed factors, the Commission made further determinations on the issues of remedy, certain statutorily enumerated public interest concerns, and bonding. [30]

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[28] Id. at 1458.

[29] Commission interim rule 210.24(e)(1)(19 C.F.R. § 210.24(e)(1)).

[30] Commission interim rule 210.24(e)(18)(19 C.F.R. § 210.24(e)(18)).

1. Reason to Believe that Section 337 Has Been Violated and Complainant's Likelihood of Success on the Merits

In Fluidized Supporting Apparatus and Components Thereof (Temporary Relief Proceedings), Inv. No. 337-TA-182/188, 225 USPQ 1211, 1213 (USITC 1984), the Commission stated that section 337(e) requires that there be a reason to believe that a violation of the statute has occurred as a substantive threshold matter. The Commission explained that the "reason to believe" standard of section 337(e) is closely related to the traditional equity factor "probability of success on the merits." [31] The distinction is that section 337(e)(1) requires a reason to believe that a violation of the statute has occurred as a threshold substantive determination, while the factor probability of success on the merits "is a measure of the extent to which that threshold has been exceeded." [32]

The Commission's traditional interpretation of section 337(e) has lead to a two-step analysis of the issue of movant's likelihood of establishing a violation of section 337. The Commission first determined whether the threshold "reason to believe" test had been met. This test could be met by something less than a preponderance of the evidence. [33] The Commission then determined the strength of movant's case on the merits. This second

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[31] Fluidized Supporting Apparatus, at 1213.

[32] Id. at 1213-1214.

[33] Apparatus for the Production of Copper Rod, Inv. No. 337-TA-89 (Temporary Relief Proceedings), 214 USPQ 893, 894 (USITC 1980).

determination corresponded to the federal court's consideration of the factor likelihood of success on the merits. [34]

As discussed above, the Federal Circuit requires at least a reasonable likelihood of success on the merits in order to support issuance of preliminary relief in patent-based cases. [35] In this regard, the Federal Circuit's standard for issuing temporary relief in patent cases is compatible with subsection 337(e)(1)'s substantive requirement that there be a "reason to believe that a violation has occurred" in order for relief to be granted. Accordingly, the Commission will no longer do a two-step analysis on the issue of movant's likelihood of success on the merits in patent-based investigations. Like the Federal Circuit, the Commission will do a single analysis of the issue.

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[34] In theory, the Commission's interpretation of subsection 337(e) allowed it to forego balancing the traditional equity factors when it did not find a reason to believe that section 337 had been violated. In practice, the Commission has routinely considered all of the traditional equity factors, even in cases in which it denied temporary relief because movant did not establish a reason to believe that section 337 had been violated. See, e.g., Copper Rod, supra; Crystalline Cefadroxil Monohydrate, Inv. No. 337-TA-293 (Temporary Relief Proceeding), USITC Pub. 2240 (Nov. 1989), rev'd on other grounds, sub nom. Bristol-Myers v. U.S. International Trade Commission, unpublished opinion 89-1530 (Fed. Cir. Dec. 8, 1989).

[35] Roper, 757 F.2d at 1271; H.H. Robertson, 820 F.2d at 387; T.J. Smith, 821 F.2d at 647.

2. Immediate and substantial harm to the domestic industry in the absence of relief

While district courts consider whether the movant would suffer "irreparable" harm if relief were not issued pendente lite, [36] the Commission has considered whether there would be "immediate and substantial" harm to the complainant in the absence of temporary relief. "Immediate" has been characterized by the Commission as harm likely to occur before the Commission is able to issue permanent relief. [37] This aspect of the Commission's practice corresponds to the federal district court practice of requiring that the threatened harm take place before the litigation is completed. [38]

The requirement that the harm be "substantial" apparently is based on former section 337's requirement that all complainants prove substantial injury in order to establish a violation of section 337. [39] In Slide Fastener

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[36] See Wright & Miller, Federal Practice and Procedure: Civil § 2947.

[37] Slide Fastener Stringers and Machines and Components Thereof, Inv. No. 337-TA-85 (Temporary Relief Proceedings), 216 USPQ 907, 917 (USITC 1981); Fluidized Supporting Apparatus, 225 USPQ at 1218.

[38] See Wright & Miller, Federal Practice and Procedure: Civil § 2947.

[39] Section 337, as amended by the OTCA, however, no longer requires owners of statutory intellectual property rights (patents, registered trademarks, copyrights, and mask works) to demonstrate substantial injury in order to prove a violation. 19 U.S.C. § 1337(a)(1).

In addition, the House Ways and Means Committee report accompanying the Trade Act of 1974 used the term "immediate and substantial" in describing the harm to the domestic industry that would support temporary relief under former section 337. The report stated:

> The Commission would be authorized at any time . . . before completing its investigation, to issue a temporary order of exclusion if it is satisfied from the

(continued...)

Stringers and Machines and Components Thereof, Inv. No. 337-TA-85 (Temporary Relief Proceedings), 216 USPQ 907, 917 (USITC 1981), the Commission defined "substantial harm" as injury to the domestic industry so significant that it would not fully recover from the harmful effects of the section 337 violation once permanent relief was granted. More recent Commission temporary relief decisions have not required that level of injury. These decisions have instead relied on potential lost sales or market share, potential price erosion, and large volumes of sales by respondents as the basis for a grant of temporary relief. [40]

In practice, the Commission has not considered its "immediate and substantial" harm standard to be different from the irreparable harm standard of the federal courts. Beginning with Apparatus for the Production of Copper Rod, Inv. No. 337-TA-89 (Temporary Relief Proceedings), 214 USPQ 893, 894 (USITC 1980), the Commission has consistently referred to the "immediate and substantial harm" standard as similar to and derived from the irreparable harm

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[39](...continued)

> evidence . . . that a probable unfair method or act has been established, and that, in the absence of such temporary order of exclusion, immediate and substantial harm would result to the domestic industry.

H. Rep. No. 571, 93d Cong., 1st Sess. 78-79 (1973).

[40] See, e.g. Double-Sided Floppy Disk Drives, Inv. No. 337-TA-215 (Temporary Relief Proceedings, 227 U.S.P.Q. 982 (USITC 1985); Certain Crystalline Cefadroxil, Inv. No. 337-TA-293 (Temporary Relief Proceedings), USITC Pub. 2240 (Nov. 1989); Radiotelephones and Subassemblies and Components Thereof, Inv. No. 337-TA-297 (Unreviewed ID)(1989).

standard of the federal district courts. [41] In Slide Fastener Stringers, 216 USPQ at 917, the Commission stated that its requirement that a complainant show "immediate and substantial" harm in the absence of temporary relief corresponds to the requirement of Rule 64 [sic, 65] of the Federal Rules of Civil Procedure that a movant for a preliminary injunction show that it is likely to suffer "irreparable" harm in the absence of relief.

Although the Commission has always viewed its "immediate and substantial" standard to be the equivalent of the federal courts "irreparable" standard, it is apparent from the submissions received by the Commission in this investigation that there is some confusion concerning the meaning of the two standards. The Commission investigative attorney and respondents are of the opinion that "irreparable" may connote more harm than "immediate and substantial." Complainant Rosemount, on the other hand, believes that "irreparable" may be an easier standard for complainants to meet. In the Pressure Transmitters ID, the ALJ wrote that substantial harm could be more or less than irreparable harm.

Given that new subsection 337(e)(3) now directs the Commission to grant preliminary relief to the same extent as it is granted by the federal courts, the Commission now determines to adopt formally the federal court standard of assessing whether complainant will suffer irreparable harm in the absence of temporary relief. Use of the same standard of harm as that of the district

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[41] See also Fluidized Supporting Apparatus, 225, U.S.P.Q. at 1213; Floppy Disk Drives, 227 U.S.P.Q. 982, 984 (USITC 1985); Slide Fastener Stringers 216 USPQ at 909-910.

courts will make it easier for parties and the Commission to find guidance in district court decisions and appellate decisions of the Federal Circuit.

3. Harm, If Any, To the Respondents If Temporary Relief Is Granted

The Commission has considered "harm, if any" to respondents if temporary relief is granted. [42] The Federal Circuit, however, considers the balance of harm between the patentee and the accused infringer. [43] The Commission believes that these two standards are equivalent in practice. However, in the interest of conforming Commission practice with federal court practice, the Commission hereby adopts the federal practice of considering the balance of harm between the parties.

4. The Effect, If Any, that the Issuance of Temporary Relief Would Have on the Public Interest.

The fourth factor considered by the Commission is the effect, if any, that relief would have on the public interest. These factors include, at minimum, the factors enumerated in section 337(e)(1), i.e., public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States and United States consumers. [44] The legislative history of the 1974 Trade Act states

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[42] Commission interim rules 210.24(e)(1), and (9)(19 C.F.R. § 210.24(e)(1), and (9).

[43] See e.g., H.H. Robertson, 820 F.2d at 390; T.J. Smith, 821 F.2d at 648; Hybritech, 849 F.2d at 1457.

[44] Fluidized Supporting Apparatus, 225 USPQ at 1214. Section 337 (e) states in pertinent part:

(continued...)

that these enumerated factors "must be paramount in the administration of section 337." [45] In enacting the OTCA, Congress did not indicate that it no longer considers the enumerated public interest factors to be paramount in the administration of section 337. [46] Accordingly, the Commission does not interpret subsection 337(e)(3), which was added by the OTCA, to mandate a change in Commission practice concerning the consideration of public interest factors.

The Commission's past practice, like federal court practice, has been to consider whether complainant is entitled to relief in view of the four factors discussed above. If the Commission determined that, on balance, the factors favored granting relief, it has proceeded to make further determinations on

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[44](...continued)
[the Commission] may direct that the articles concerned, imported by any person with respect to whom there is reason to believe that such person is violating this section, be excluded from entry into the United States unless, after considering the effect of such exclusion upon the public health and welfare, competitive conditions in the United States economy, the production of like or directly competitive articles in the United States and United States consumers, it finds that such articles should not be excluded from entry. . . .

[45] S. Rep. 1298, 93rd Cong., 2d Sess. 193 (1974).

[46] In Bristol-Myers v. U.S. International Trade Commission, unpublished opinion, 89-1530, the Federal Circuit apparently overlooked the statutory public interest factors when it held that the principle public interest policy implemented by section 337 was the protection of valid patents, (Opinion at 15). The Commission views the Bristol-Myers decision as limited to the facts of that case. In Bristol-Myers, the Federal Circuit reversed the Commission's determination that the patent at issue would likely be shown to be invalid and held that the particular public interest factors before the Commission in that case did not prevent issuance of relief.

the issues of remedy, public interest, and bonding. [47] The Commission believes that these further determinations, necessary in administering the statute, do not in conflict with subsection 337(e)(3)'s provision that the Commission may grant preliminary relief to the same extent as preliminary relief is granted by the federal courts.

In summary, the Commission has determined to merge its analysis of whether there is a "reason to believe that section 337 has been violated" into its analysis of the factor "likelihood of success on the merits." As in the Federal Circuit, in order to obtain temporary relief at the Commission, complainant will have to demonstrate both a reasonable likelihood of success on the merits and irreparable harm in the absence of relief. Irreparable harm may be demonstrated either by a factual showing or by an unrebutted presumption based on clear showings of patent validity and patent infringement. The Commission will also consider the balance of harm to the parties and the public interest in determining whether to grant temporary relief.

IV. The Patent at Issue and Its Invention

The '413 patent, entitled "Differential Pressure Transducer," was issued on April 2, 1974, and will expire on that date in 1991. The '413 patent contains four claims. It issued to the inventor, Roger Frick, and is assigned to complainant Rosemount. There are no domestic licensees, but the patent is licensed to two Japanese firms, Yokogawa Electric Works Ltd. and Fuji Electric

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[47] Commission interim rule 210.24(e)(18) (19 C.F.R. § 210.24(e)(18).

Co., Ltd. Those companies are licensed to sell pressure transmitters containing the '413 pressure sensor in the United States. [48]

The '413 patent describes and claims methods for making capacitor pressure cell assemblies, also called pressure sensors. These assemblies are used in pressure transmitters, devices that measure the flow rate of fluids in industrial processes. In this type of pressure cell, a metal sensing diaphragm is placed between and insulated from two fixed metal capacitor plates. The sensing diaphragm is displaced by the pressure of the fluids, thereby varying the capacitance. The change in capacitance is measured electronically to indicate the pressure.

V. The Four Factors Applied in Determining Whether to Grant Temporary Relief in This Investigation

A. Probability of Success on the Merits

In a patent-based section 337 temporary relief proceeding, probability of success on the merits is established by showings that: (1) respondents are not likely to succeed in proving that the patent at issue is invalid or unenforceable; [49] (2) it is likely that respondents will be found to infringe the patent; and (3) it is likely that a domestic industry will be shown to exist or to be in the process of being established.

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[48] Tr. 19-20 (Kooiman).

[49] Uneforceability is not an issue in this investigation.

1. Validity of the '413 Patent

Respondents SMAR Equipment and SMAR International (collectively "SMAR") contended that the '413 patent was invalid as obvious under 35 U.S.C. § 103, which provides that a patent will not be granted on an invention that would have been obvious at the time the invention was made to one of ordinary skill in the art. SMAR argued that the '413 patent was obvious in view of four prior art references.

The Commission adopts the findings and analysis of the validity issue found in the ID at pages 6-11. The ID determined that the prior art references relied upon by respondents were all before the patent examiner at the U.S. Patent and Trademark Office (PTO). ID at 8. The ID discussed each of the four prior art references in detail and determined that the prior art relied upon by respondents does not disclose the combination of elements that is claimed in the '413 patent, or each of the elements individually. ID at 9-11. The ID discussed the differences between the prior art and the invention claimed in the '413 patent. ID at 7-11. The ID found that the level of ordinary skill in the relevant art at the time the invention was made was that of a college graduate with a bachelor's degree in engineering or physics, or someone with hands-on experience in working in the field of differential pressure transducers. ID at 6-7.

SMAR made no showing, as required by In re Sernaker, 702 F.2d 989, 994 (Fed. Cir. 1983), that the prior art contained the suggestion to combine the prior art in the manner of the invention of the '413 patent. The ID concluded that respondents are not likely to show during the permanent relief phase of

the investigation that the invention of the '413 patent would have been obvious to one ordinarily skilled in the art at the time the invention was made. ID at 11. The ID also determined that it is likely that complainant will be able to show in the permanent relief phase of the investigation that secondary considerations support the nonobviousness of the '413 patent. ID at 11.

2. Infringement

Respondents import two types of pressure transmitter -- one containing a sensor made with glass insulating material and the other containing a sensor made with ceramic insulating material. Complainant alleged that respondents' glass sensors are made by a process that literally infringes claims 1-4 of the '413 patent, and that respondents' ceramic sensors are made by a process that infringes claim 1, 3, and 4 of the '413 patent, either literally or under the doctrine of equivalents.

Under Texas Instruments v. USITC, 805 F.2d 1558, 1562 (Fed. Cir. 1986), patent infringement entails two inquiries: determination, as a matter of law, of the scope of the claims and the factual finding of whether the claims, properly construed, encompass the accused device either literally or under the doctrine of equivalents. The scope of claims is ascertained by reference to the claim language, the specification, and the prosecution history. [50]

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[50] Fromson v. Advance Offset Plate Inc., 720 F.2d 1565, 1569-1571 (Fed. Cir. 1983).

a. Infringement of Claims 1-3 by Respondents' Process for Manufacturing Glass Sensors

Respondents admitted that they practice each of the steps of claims 1, 2, and 3 in the manufacture of their glass sensors with the exception of (a) the step directed to filling a metal cavity with insulating material and (b) the step directed to sealing the sensing diaphragm to the housing. [51] The first step is found in claims 1-3 of the '413 patent which recite "filling said cavity with an insulation material." [52] The second step is found in claims 1 and 3 which recite "enclosing the concave surface with a sensing diaphragm sealed to said one housing section to form a sensing chamber."

Respondents argued that the claim term "filling said cavity with an insulation material" was limited to complainant's method of manufacture whereby the metal cavity is filled with glass chips and heat is applied to melt the glass. Respondents argued that their process does not infringe the '413 claims because in respondents' process [C C]. As the [C C -]. Mr. Gorini, president of SMAR, testified that in SMAR's process the cavity [C C] prior to fusing. According to Mr. Gorini, the [C] in the cavity. [53] In addition, Mr.

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[51] Rosemount's Exh. 5.

[52] The '413 patent claims are appended to this opinion.

[53] Tr. 328-332 (Gorini).

Gorini testified that in SMAR's process, ceramic is placed in the cavity as well as glass. [54]

Complainant argued that the phrase "filling said cavity with an insulation material" encompasses respondents' method because, as admitted by Mr. Gorini, [55] [C C]. Complainant also maintained that the claim language at issue does not preclude filling the cavity with two different insulating materials (i.e., glass and ceramic).

The Commission finds that the claim language term "filling said cavity with an insulation material" is not limited by the specification or the prosecution history to any particular manner of filling the cavity. Thus, respondents method of [C C] the metal cavity is within the claim limitation. We further find that the claim term at issue is not limited to using only one ype of insulation material. While the claim calls for "an insulation material," the addition of a second insulation material does not take respondents process outside the claim language. The use of two materials necessarily includes the use of one insulating material.

Respondents also argued that the language "enclosing the concave surface with a sensing diaphragm sealed to said one housing section to form a sensing chamber" as required by claims 1 and 3 was limited to sealing the diaphragm to only one housing section. Respondents contended that because they sealed both

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[54] Tr. 329 (Gorini).

[55] Tr. 331-332 (Gorini).

housing sections [C], they did not practice this process step. Complainant Rosemount responded that the [C] sealing of the sensing diaphragm to both housing sections certainly includes sealing the sensing diaphragm to one of the housings, and therefore falls within the claim language.

The Commission determines that the [C] sealing of the sensing diaphragm to both housing sections includes sealing the sensing diaphragm to one of the housings. Thus, all of the elements of claims 1-3 are found in respondents' process for manufacturing glass sensors. [56] Accordingly, the Commission determines that complainant has made a strong showing that respondents' process for manufacturing glass sensors literally infringes claims 1-3 of the '413 patent.

b. Infringement of Claims 1 and 3 by Respondents' Process for Manufacturing Ceramic Sensors

Respondents admitted that their process for manufacturing ceramic sensors included all of the steps of claim 1 and 3, except for:

> (a) providing massive metal housing sections, at least one of said sections having an internal cavity,
>
> (b) filling said cavity with an insulation material and fusing said material to the metal surfaces defining said cavity,

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[56] We attach the ID's findings of fact concerning literal infringement of claims 1-3 by respondent's process for the manufacture of glass sensors (F1-F31). The ID adopted these findings of fact from Commission investigative attorney's post hearing submission. The Commission also adopts these findings of fact.

> (c) forming a concave surface in said insulation material after it has been fused to the cavity surface,
>
> (e) enclosing the concave surface with a sensing diaphragm sealed to said one housing section to form a sensing chamber, said sensing diaphragm forming a second capacitor plate. [57]

Respondents argued that their process for making ceramic sensors does not literally infringe claims 1 and 3 the '413 patent because, inter alia, it does not include the step of fusing insulation material to a metal housing. Respondents argue that the claim term "fusing" requires that the insulation material be joined to the metal housing by melting. Respondents support their contention that fusing requires melting by reference to the specification where the fusing step is described as taking place in a furnace. [58]

Mr. Gorini testified that respondents' process for making ceramic sensors does not include a fusing step. [59] In respondents' process a [C C]. [60] The [C]. [61] Respondents refer to this as [C]. [62] Mr. Gorini testified that a commercial bonding material called Loctite [C

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[57] Rosemount Exh. 5.

[58] '413 patent specification, col. 2, line 54.

[59] Tr. 333, 335 (Gorini).

[60] Tr. 334 (Gorini).

[61] Id.

[62] Tr. 333 (Gorini).

C]. [63] Respondents' expert, Mr. Yoon, testified that Loctite does not chemically bond ceramic to the metal. [64] Mr. Yoon testified that while Loctite bonds plastics, it cannot bond ceramic to metal because Loctite is an organic material that is chemically incompatible with inorganic glass and ceramic materials. [65] Mr. Yoon further testified that Loctite cannot fuse ceramic to metal. [66]

Complainant argued that the language "fusing [the insulation] material" is broad enough to encompass any manner of fixing the insulating material to the metal housing that results in a stable leak free unitary structure. Complainant's expert, Mr. Smoot, testified that he understood fusing to have two meanings -- one being to melt and the other being to join as if by melting. [67] Complainant argued that "fusing" should be interpreted as including all forms of fixing or adhering the insulating material to the metal housing to form a stable unitary structure. The inventor of the patent, Mr. Frick, testified that using Loctite in the manner that it is used by respondents is a type of fusing. [68]

For purposes of the temporary relief proceeding, the Commission adopts the ID's factual finding that respondents' process for the manufacture of ceramic sensors does not include the step of fusing the insulation material to

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[63] Tr. 348 (Gorini).

[64] Tr. 753-754 (Yoon).

[65] Tr. 728 (Yoon).

[66] Tr. 732 (Yoon).

[67] Tr. 466 (Smoot).

[68] Tr. 236 (Frick).

the metal surfaces of the housing, ID at 12. Accordingly, the Commission finds that complainant has not demonstrated that respondents' process for making ceramic sensors literally infringes claims 1 and 3. The Commission does not at this time reach the question of whether any other limitations of claims 1 and 3 may be absent from respondents' process.

Complainant alleged in the alternative that respondents' process for making ceramic sensors infringed claims 1 and 3 under the doctrine of equivalents. Infringement under the doctrine of equivalents may be found even though the accused device or process does not literally infringe the claims if the device or process performs substantially the same function in substantially the same way to produce substantially the same result as the patented invention. [69]

A finding of equivalence is a determination of fact. [70] The ID made the factual determination that Loctite performed the same function as fusing, i.e., it bound two parts together, but that Loctite performed this function in a substantially different way. [71] Under Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 935-939 (Fed. Cir. 1987)(en banc), cert. denied. 485 U.S. 961 (1988), infringement under the doctrine of equivalents requires that the substantial equivalent of each limitation of the claim be found in the accused

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[69] Graver Tank & Mfg. Co., Inc. v. Linde Air Products Co., 339 U.S. 605, 608 (1950); Pennwalt Corp. v. Durand-Wayland, Inc., 833 F.2d 931, 934 (Fed. Cir. 1987)(en banc), cert. denied, 485 U.S. 961 (1988).

[70] Graver Tank, 339 U.S. at 609.

[71] ID at 13. The ID implicitly found that the use of Loctite achieved the same result as fusing. Id.

device. In this investigation, the ID determined that the substantial equivalent of the claim limitation "fusing [the insulation] material to the metal surfaces" is not present in respondents' process for making ceramic sensors. Accordingly, the Commission finds that complainant has not demonstrated that respondents' process for manufacturing glass sensors infringes claims 1 and 3 of the '413 patent under the doctrine of equivalents. For purposes of this temporary relief proceeding, the Commission does not decide whether the substantial equivalents of any other limitations of claims 1 and 3 may be absent from respondents' process.

b. Infringement of Claim 4 by Both of Respondents' Processes

Respondents admitted that both of their manufacturing processes included all of the limitations of claim 4 except:

> (f) providing a wall member,
>
> (g) clamping said sensing cell sections together against said wall member so that said sensing diaphragm is claimed at a first clamping stress level,
>
> (h) and clamping said outer housing to support portions of said wall member other than those clamping the sensing cell sections to mechanically support said outer housing on the support portions at a desired clamping force before the outer housing is pressed against said cell sections to thereby support said outer housing without substantially changing the clamping stress on said diaphragm. [72]

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[72] Rosemount Exh. 5.

Respondents contended that neither of their processes infringe claim 4 because both processes utilize a flexible clamping system. According to respondents, claim 4 is limited to rigid clamping by means of cap screws and a rigid ring. Although the preferred embodiment of the '413 patent utilizes a rigid clamping system, the Commission finds that the claim is not so limited. The Commission determines that claim 4 is broad enough to encompass respondents' flexible clamping system.

At the temporary relief hearing, complainant's expert Mr. Smoot testified that each of the claim limitations of claim 4, not conceded by respondents, are found in both of respondents' processes for making pressure sensors. [73] This testimony was not substantially rebutted by respondents. The ID determined that all of the limitations of claim 4 were found in both of respondents' processes. The Commission adopts this factual determination. [74] Accordingly, the Commission determines that complainant has made a strong showing that both of respondents' processes literally infringe claim 4 of the '413 patent. In view of these determinations, the Commission does not reach the issue of whether claim 4 is infringed under the doctrine of equivalents.

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[73] Tr. 462-64 (Smoot).

[74] The findings of fact made in the ID concerning the infringement of claim 4 are attached to this opinion (F64-F89). The Commission adopts these findings to the extent that they concern literal infringement of claim 4.

3. Domestic Industry

Section 337(a) provides in pertinent part:

> (a) (2) [Unfair acts in importation or sale constitute a violation of section 337] only if an industry in the United States, relating to the articles protected by the patent, copyright, [registered] trademark, or mask work concerned, exists or is in the process of being established.
>
> (3) For purposes of paragraph (2), an industry in the United States shall be considered to exist if there is in the United States, with respect to the articles protected by the patent, copyright, [registered] trademark, or mask work concerned--
>
> > (A) significant investment in plant and equipment;
> >
> > (B) significant employment of labor or capital; or
> >
> > (C) substantial investment in its exploitation, including engineering, research and development, or licensing.

The pressure transmitter made by complainant Rosemount that contains the sensing cell covered by the '413 patent is called the Model 1151. [75] About [C] percent of complainant Rosemount' pressure transmitters contain sensors made in accordance with the claims of the '413 patent. [76]

Rosemount has made significant investments in plant, equipment, labor and capital in practicing the '413 patent. Rosemount is currently building a new [C] facility in Chanhussen, Minnesota that is completely

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[75] Tr. 37-38 (Kooiman).

[76] Tr. 94, 119 (Iverson).

dedicated to producing the Model 1151 transmitter. [77] A total of [C] dollars has been budgeted for the facility. [78] Rosemount has [C] sales offices that handle the Model 1151 pressure transmitters [79] and [C] major service centers to service the transmitters. [80] Rosemount has invested [C] dollars in equipment devoted to practicing the '413 patent. [81] Rosemount has a total of [C] manufacturing employees in its Measurement Division, which includes Rosemount's pressure transmitter operations. [82] Rosemount's new facility, which is dedicated to making the Model 1151 transmitter, employs [C] people alone. [83] From 1981 through 1989, Rosemount spent [C] on research and development of pressure transmitters. [84] Rosemount projected that in 1989 it would derive royalties of [C] from its '413 patent licenses. [85]

Based on Rosemount's significant investment in plant and equipment, its significant employment of labor and capital, and its substantial investment in research and development, and licensing, the Commission determines that Rosemount is likely to demonstrate the existence of a domestic industry.

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77 Rosemount Exh. 27; Tr. 38 (Kooiman); SMAR Exh. 26.

78 Tr. 97 (Iverson).

79 Rosemount Exh. 28; Tr. 38 (Kooiman).

80 Rosemount Exh. 29.

81 Rosemount Exh. 42; Tr. 96 (Iverson).

82 Rosemount Exh. 44 Tr. 99 (Iverson).

83 SMAR Exh. 26.

84 Rosemount Exh. 43 Tr. 98 (Iverson).

85 Rosemount Exh. 34.

B. Harm to Complainant

1. Presumption of Irreparable Harm

In Atlas Powder, 773 F.2d at 1233, the Federal Circuit held that prior adjudications or admissions of validity and infringement are not prerequisites to demonstrating the clear showing needed to support a presumption of irreparable harm. Instead, the presumption is warranted when a patentee "clearly shows" that his patent is valid and infringed. [86] In H.H. Robertson, 820 F.2d at 388, the court explained that its statement in Atlas Powder that the patentee "clearly show" validity did not change the allocation to the challenger of the burden of proving invalidity, but rather reflected the rule that the burden is always on the movant to demonstrate entitlement to preliminary relief. That entitlement, however, is determined in the context of the presumptions and burdens that would inhere at the trial on the merits.

In this case, respondents' attack on the validity of the '413 patent is weak. Respondents did not put forward any prior art that was not before the PTO when the patent application was examined. Respondents made no showing, as required by In re Sernaker, 702 F.2d at 994, that the prior art teachings contained the suggestion to combine the prior art in the manner of the invention of the '413 patent. Complainant also demonstrated that secondary considerations were likely to support the validity of the patent. The Commission finds that for purposes of the temporary relief phase of this

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[86] Atlas Powder, 773 F.2d at 1233.

investigation, the complainant has made a clear showing on the issue of patent validity. Moreover, the Commission finds that complainant has made a clear showing that the respondents are infringing the '413 patent. Based on these clear showings of patent validity and infringement, the Commission finds that complainant is entitled to a presumption of irreparable harm.

2. The Presumption of Irreparable Harm is Rebutted

A presumption of irreparable harm can be overcome by clear and convincing evidence to the contrary. [87] Consideration of the evidence in view of the harm factors focused on by federal courts, [88] leads the Commission to conclude that the presumption of irreparable harm is rebutted in this case. Complainant Rosemount delayed 11 months before bringing an action against respondents at the Commission. [89] This delay suggests that Rosemount does not consider respondents' presence in the U.S. market to be particularly alarming. [90] Moreover, Rosemount has two Japanese licensees that sell pressure transmitters in the U.S. market. [91] The grant of these licenses is incompatible with the

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[87] Roper, 757 F.2d at 1272.

[88] Discussed supra, at 7-8.

[89] Rosemount first became aware of respondents' presence in the U.S. market in late October 1988. Tr. 40-41 (Kooiman).

[90] See T.J. Smith, 821 F.2d at 648 (a presumption of irreparable harm would have been rebutted by patentee's delay of 15 months in bringing an action against the accused infringer).

[91] Tr. 19-20 (Kooiman).

emphasis the Federal Circuit has placed on the right to exclude as the basis for the presumption of irreparable harm. [92]

Rosemount is the leader in the U.S. pressure transmitter market with a [C] market share. [93] Rosemount has not lost any market share to respondents. Rosemount experienced a growth rate in sales of pressure transmitters of [C] between fiscal years 1987-1988 and 1988-1989. [94] Rosemount projects [C] in sales for fiscal years 1989 and 1990. [95] Rosemount expects to increase its U.S. market share over the next four to five years by [C] percentage points. [96]

Respondents currently have a very small share of the U.S. market, [97] and are unlikely to increase that market share significantly during the remaining seven months of this investigation. Respondents have a small operation that employs only [C] people in the production of pressure transmitters. [98] Rosemount, on the other hand, employs [C] people in the production of Model

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92 T.J. Smith, 821 F.2d at 648.

93 Tr. 133-134 (Jandorf).

94 Tr. 108, 113 (Iverson); SMAR Exh. 20.

95 Tr. 104 (Iverson); SMAR Exh. 18.

96 Tr. 136 (Jandorf).

97 Tr. 156 (Jandorf). Respondents have made only one sale in the United States, a purchase of [C]. Tr. 160-161 (Jandorf); SMAR Exh. 25. These transmitters were ordered in December 1988 by [ ]. Id. Delivery was made in March and April 1989. Tr. 357-358 (Selli). Respondents project total U.S. sales of [ ] in 1989. SMAR Exh. 25. This amount constitutes [ ] of Rosemount's projected 1989 U.S. sales of pressure transmitters of [ ], Tr. 113 (Iverson); SMAR Ex. 20.

98 SMAR Exh. 39, Response No. 2(e).

1151 pressure transmitters in a highly automated new production facility. [99] Respondents can produce only [C] pressure transmitters in one year, [100] while Rosemount produces [C] pressure transmitters containing the '413 sensor in one week. [101] In addition, because Rosemount has at least fourteen major competitors in the U.S. market, including two of its own licensees, [102] it is unlikely that any market share gained by respondents would be entirely at Rosemount's expense.

Rosemount is unaware of any specific complaints by Rosemount's licensees concerning respondents presence in the U.S. market. [103] Rosemount is also unaware of any infringers other than SMAR in the U.S. market. [104] The patented pressure sensors do not involve rapidly changing technology or a short product life span. They have been manufactured and sold by Rosemount since 1970. [105] Finally, the injury to Rosemount is not unpredictable. The '413 patent will expire on April 2, 1991, and respondents' projected U.S. sales for 1990 are known. [106]

After examining the record in this investigation, the Commission determines that the only harm to complainant that will occur during the period

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99 SMAR Exh. 26.

100 SMAR Exh. 39 at 4.

101 SMAR Exh. 38 at 10.

102 Tr. 130-131 (Jandorf).

103 Tr. 31 (Kooiman).

104 Tr. 25 (Kooiman).

105 Tr. 93 (Iverson).

106 SMAR projects sales of [ ] for 1990. SMAR Exh. 25.

of investigation is the loss of a small amount of sales to respondents. The evidence of record therefore rebuts any presumption that Rosemount will suffer future adverse market effects by reason of the alleged infringement. [107]

The Commission is scheduled to complete this investigation by October 20, 1990. Thus, the relevant period for determining the amount of Rosemount's lost sales in the absence of temporary relief is between March 19, 1990, when temporary relief, if any, would have been granted and October 20, 1990, when the investigation will conclude. Respondents forecast U.S. sales of [C] in 199^. [108] Complainant does not dispute the accuracy of this forecast. Assuming respondents' sales are distributed evenly over time, respondents would make [C] of sales during the seven-month period between March and October 1990. Rosemount has argued that under State Industries Inc. v. Mor-Flo Industries, 883 F.2d 1673 (Fed. Cir. 1989), it is entitled to [C] percent of respondents' sales because Rosemount has [C] percent of the U.S. mar.et for pressure transmitters. [C] percent of respondents' sales during the seven month period is [C]. This amount is [C] percent of Rosemount's projected sales of its pressure transmitters in 1989, [C]. [109] The Commission finds that, under the circumstances of this case, this amount of lost sales constitutes insignificant injury to Rosemount. [110]

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[107] Cf. Hybritech, 849 F.2d 1446, 1456-1457.

[108] SMAR Exh. 25.

[109] Tr. 113 (Iverson). Rosemount projected an increase in pressure transmitter sales of [ ] percent in 1990. SMAR Exh. 18.

[110] Cf. Corning Glass Works v. USITC, 799 F.2d 1559, 1569 (Fed. Cir. 1986)(Commission determination upheld that lost sales of well under one percent of complainant's sales constituted de minimis injury).

Furthermore, the Commission determines that Rosemount's damages are easily calculated and proven, and thus should be readily compensable in money damages. Under the traditional equity standards applied by the district courts, damages fully compensable in money are not considered irreparable. [111] Section 337 remedies are in addition to any other remedies, [112] so Rosemount is not foreclosed from seeking damages in a patent infringement suit in federal district court. Accordingly, the Commission determines that any harm complainant may experience during the remaining period of investigation by reason of respondents' imports would not be irreparable harm.

The Commission does not hold, however, that lost sales may never constitute irreparable harm. It is possible, for example, that the loss of any sales could prevent a newly established firm from expanding its marketing or prevent such a firm from furthering research and development efforts necessary for its business. No such factors are present in this case, however. Sales of the pressure transmitters containing the patented sensors were projected to be [C] in fiscal year 1989. [113] Rosemount is a well established company with projected total sales of [C] in fiscal year 1989. [114] The loss of [C] in sales would not cause irreparable harm to Rosemount.

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111 7-Pt. 2 Moore's Federal Practice ¶ 65.04[1]; Wright & Miller, Federal Practice and Procedure: Civil § 2948.

112 19 U.S.C. § 1337(a)(1).

113 Tr. 113 (Iverson); SMAR Exh. 20 (Bates No. 100991A).

114 SMAR Exh. 20, Bates No. 100990A.

C. Harm to Respondents

If effective temporary relief were granted, respondents would face the loss of [C] percent of SMAR Equipment's business. [115] As discussed above, SMAR Equipment is a small operation, and the loss of [C] percent of its business would have a significant adverse impact. However, respondents would be entitled to resume their sales in this country in April 1991, when the '413 patent expires, regardless of the outcome of this investigation. The Commission finds that, if temporary relief were granted, the harm to respondents would be significant, but not devastating. Complainant's harm if relief is denied, however, would be insignificant. Accordingly, the Commission finds that the balance of harm in this case tips in favor of respondents.

D. Effect on the Public Interest

The Federal Circuit has recently held:

> Typically, in a patent infringement case, although there exists a public interest in protecting rights secured by valid patents [footnote omitted], the focus of the district court's public interest analysis should be whether there exists some critical public interest that would be injured by the grant of preliminary relief. [116]

In this case the Commission finds that the public interest would not be injured by the grant of temporary relief. Rosemount is operating under

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[115] Rosemount Exh. 60.

[116] Hybritech, 849 F.2d at 1458 (emphasis added).

capacity, [117] and can fill the orders that would go to respondents. In addition, there are twelve major suppliers in the U.S. market that sell non-infringing pressure transmitters as well as two licensees of Rosemount that sell pressure transmitters containing the patented pressure sensor. [118] It does not appear that the public health and welfare would be adversely affected by the issuance of temporary relief in this investigation.

The Commission finds that the dominant public interest factor in this investigation is the public interest in enforcing valid patent rights. This factor favors issuing temporary relief.

E. Balancing the Four Factors

The Commission determines that in this investigation:

(1) There is a strong likelihood that complainant will succeed on the merits.

(2) Complainant will not be irreparably harmed in the absence of temporary relief.

(3) The balance of harm tips in favor of the respondents.

(4) the public interest favors issuance of temporary relief.

A showing of irreparable harm in the absence of relief is a requirement for issuance of a preliminary injunction in the Federal Circuit. [119]

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[117] Tr. 140 (Jandorf).

[118] Tr. 130-131 (Jandorf).

[119] Smith International, 718 F.2d at 1578-1579; Roper, 757 F.2d at 1271-1272; T.J. Smith, 821 F.2d at 648.

Consideration of the balance of equities or the public interest, factors that counter balance each other in this case, cannot overcome this deficiency. [120] Because complainant failed to establish that it would be irreparably harmed in the absence of temporary relief, the Commission has determined to deny complainant's request for temporary relief.

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[120] See Roper, 757 F.2d at 1271-1272.

APPENDIX

Claims 1-4 are as follows:

1. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, at least one of said sections having an internal cavity, filling said cavity with an insulation material and fusing said material to the metal surfaces defining said cavity, forming a concave surface in said insulation material after it has been fused to the cavity surface, depositing a layer of electrical conductive material on said concave surface to form a first capacitor plate, enclosing the concave surface with a sensing diaphragm sealed to said one housing section to form a sensing chamber, said sensing diaphragm forming a second capacitor plate, forming a second chamber in said one housing section, closing said second chamber with a second diaphragm, providing fluid passage means between said first and second chambers, and filling said first and second chambers and said fluid passage means with a fluid to transmit pressure on said second diaphragm to said sensing diaphragm.

2. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, each of said housing sections having an internal cavity, filling said cavities with an insulation material and fusing said material to the metal surfaces defining said cavities, forming concave surfaces in said insulation material, providing electrically conductive tubular members opening to said concave surfaces and passing out the walls of said housing sections, depositing a separate layer of electrical conductive material on each of said concave surfaces electrically connected to said tubular members, sealing said sensing diaphragm means to said housing sections to form first and second sensing chambers, said housing sections having isolation chambers defined therein with isolation diaphragm means, providing fluid passage means opening between each of said isolation chambers and a corresponding sensing chamber, filling said isolation chambers, said fluid passage means and said sensing chambers with a fluid through said tubular members sealing said tubular members after the filling step, and connecting electrical lead means to said tubular members after they have been sealed.

3. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, at least one of said sections having an internal cavity, filling said cavity with an insulation material and fusing said material to the metal surfaces defining said cavity, forming a concave surface in said insulation material after it has been fused to the cavity surface, depositing a layer of electrical conductive material on said concave surface to form a first capacitor plate, enclosing the concave surface with a sensing diaphragm sealed to said one housing section, said sensing diaphragm forming a second capacitor plate, providing a second chamber closed by a second diaphragm on said one section providing fluid passage means between the area enclosed between the concave surface and the sensing diaphragm and said second chamber, filling said second chamber, said fluid passage means and the area enclosed by said sensing diaphragm with fluid to transmit pressure on said second diaphragm to said sensing diaphragm.

4. A method of making a differential capacitive pressure transducer having a sensing cell of the capacitive type and an outer housing forming a pair of pressure chambers, including the steps of providing two sensing cell sections, each of said cell sections having a first chamber defined in one surface thereof, a spaced second chamber and fluid passage means extending between said first and second chambers of each cell section, placing a sensing diaphragm between said cell sections to close both of said first chambers, closing each of said second chambers with second diaphragms, filling said first and second chambers and said fluid passage means on each cell section with fluid to transmit pressure on said second diaphragm to said sensing diaphragm, providing a wall member, clamping said sensing cell sections together against said wall member so that said sensing diaphragm is clamped at a first clamping stress level, and clamping said outer housing to support portions of said wall member other than those clamping the sensing cell sections to mechanically support said outer housing on the support portions at a desired clamping force before the outer housing is pressed against said cell sections to thereby support said outer housing without substantially changing the clamping stress on said diaphragm.

F. INFRINGEMENT OF THE '413 PATENT

(1) RESPONDENTS' GLASS-FUSED SENSOR CELL INFRINGES CLAIMS 1, 2, AND 3 OF THE '413 PATENT

F1. Complainant's expert testified that he knows of no way to make the product described by the '390 patent other than by the processes described in the '413 patent. Smoot Tr. 608.

F2. SMAR provides a C metal housing with a cavity. Gorini Tr. 629.

F3. SMAR inserts C in the metal housing and then places glass in the cavity and melts it. Gorini Tr. 629-30.

F4. SMAR places glass C in their cavity to be melted and fused. Smoot Tr. 514.

F5. When the C glass is placed into the cavity for fusing, the cavity is C about C filled. Gorini Tr. 660.

F6. SMAR fills the cavity with an insulation material and fuses the material to the metal surfaces defining the cavity. Smoot Tr. 459-462 and Rosemount Phys. Exh. AA and AD.

F7. After the fusing process, the cavity is 100% filled. Gorini Tr. 660.

F8. SMAR fills the cavity with glass C

C Gorini Tr. 632.

F9. SMAR makes a concave surface in the glass. Gorini Tr. 632.

F10. SMAR forms concave surfaces in the insulation material. Smoot Tr. 460.

F11. SMAR

C

Gorini Tr. 633, Smoot Tr. 523. This is an operation which Rosemount does not have to perform. Smoot Tr. 523.

F12. SMAR C

Gorini Tr. 634-5.

F13. SMAR C

Gorini Tr. 635-6.

F14. SMAR provides two isolation diaphragms. Gorini Tr. 636.

F15. SMAR provides a C diaphragm and C of the sensor. Gorini Tr. 637.

F16. SMAR encloses the concave surface with a sensing diaphragm C to form a sensing chamber, the sensing diaphragm forming a second capacitor plate. Smoot Tr. 460, 462.

F17. SMAR C Gorini Tr. 637-8; Smoot Tr. 526. Rosemount does not C its diaphragm to stretch it but mechanically stretches it. Smoot Tr. 5[illegible], 531.

F18. The '413 patent discloses stretching the diaphragm taught and welding it into place. There are several ways in which the diaphragm may be stretched, including mechanical stretching, weights, and heating the outer ring. Frick Tr. 228-9.

F19. After SMAR C its diaphragm to stretch it when the cell is closed, the two half cells are welded together with the central diaphragm in the middle. Gorini Tr. 637-40.

F20. SMAR C the isolation diaphragms to the two half cells with the C diaphragm. Gorini Tr. 640.

F21. SMAR C Gorini Tr. 641.

F22. SMAR C . Gorini Tr. 642.

F23. SMAR C . Gorini Tr. 642-3.

F24. SMAR C Gorini Tr. 643.

F25. SMAR C Gorini Tr. 644-55.

F26. SMAR C . Smoot Tr. 547-8.

F27. The '413 patent calls for solid rings. Frick Tr. 223.

F28. SMAR C . Gorini Tr. 643-6.

F29. Pursuant to Claim 1 of the '413 patent, SMAR constructs a pressure sensing cell assembly of the capacitor type having a glass insulating material using a method which:

A. provides a massive metal housing section, at least one of these sections having an internal cavity,

B. fills this cavity with an insulation material and fuses this material to the metal surfaces defining the cavity,

C. forms a concave surface in the insulation material after it has been fused to the cavity surface,

D. deposits a layer of electrically conductive material on the concave surface to form a capacitor plate,

E. encloses the concave surface with a sensing diaphragm sealed to the one housing section to form a sensing chamber, the sensing diaphragm forming a second capacitor plate,

F. forms a second chamber in the one housing section,

G. closes the second chamber with a second diaphragm,

H. provides fluid passage means between the first and second chambers, and

I. fills the first and second chambers and the fluid passage means with a fluid to transmit pressure on the second diaphragm to the sensing diaphragm. Smoot Tr. 431-531; Gorini Tr. 629-660.

F30. Pursuant to Claim 2 of the '413 patent, SMAR constructs a pressure sensing cell assembly of the capacitor type having a glass insulating material using a method which:

A. provides massive metal housing sections, each of which have an internal cavity,

B. fills the cavities with an insulation material and fuses the material to the metal surfaces defining the cavities.

C. forms concave surfaces in the insulation material.

D. provides electrically conductive tubular members opening to the concave surfaces and passing out the walls the housing sections.

E. deposits a separate layer of electrically conductive material on each of the concave surfaces electrically connected to the tubular members.

F&G. seals the sensing diaphragm means to the housing sections to form first and second sensing chambers, the housing sections having isolation diaphragm means.

H. provides fluid passage means opening between each of the isolation chambers and a corresponding sensing chamber.

I. fills the isolation chambers, the fluid passage means and the sensing chambers with a fluid through the tubular members.

J. seals the tubular members after the filling step, and

K. connects electrical means in the tubular members after tney have been sealed. Smoot Tr. 431-531; Gorini Tr. 629-660.

F31. Pursuant to Claim 3 of the '413 patent, SMAR constructs a pressure sensing cell assembly of the capacitor type having a glass insulating material using a method which:

A. provides a massive metal housing section,

B. at least one of these sections having an internal cavity,

C. fills this cavity with an insulation material, and fuses this material to the metal surfaces defining the cavity,

D. forms a concave surface in the insulation material after it has been fused to the cavity surface,

E. deposits a layer of electrically conductive material on the concave surface to form a capacitor plate,

F&G. encloses the concave surface with a sensing diaphragm sealed to the one housing section, the sensing diaphragm forming a second capacitor plate.

H. provides a second chamber closed by a second diaphragm on the one section.

F. forms a second chamber in the one housing section.

G. closes the second chamber with a second diaphragm.

H. provides fluid passage means between the first and second chambers, and

I. fills the first and second chambers and the fluid passage means with a fluid to transmit pressure on the second diaphragm to the sensing diaphragm. Smoot Tr. 431-531; Gorini Tr. 629-660.

(3) INFRINGEMENT OF CLAIM 4 OF THE '413 PATENT

F64. The wall member of the '413 patent is the internal and external surfaces of the housing that holds the sensing cell. Smoot Tr. 561.

F65. The Wolfe patent was considered as prior art by the PTO Examiner in granting the '413 patent. SMAR Exhibits 2 and 5.

F66. The Wolfe patent discloses a capacitive type pressure transmitter. Smoot Tr. 486; SMAR Exh. 6.

F67. The Wolfe patent discloses an insulation material having concave surfaces formed on it. Smoot Tr. 486.

F68. The Wolfe patent discloses a deposited layer of conductive film on the concave surfaces. Smoot Tr. 486.

F69. The sensor of the pressure transmitter disclosed in the Wolfe patent operates as most capacitive sensors do, by comparing the capacitance changes on the two sides of the cell as the membrane is deflected. Smoot Tr. 486-67.

F70. In the pressure transmitter disclosed in the Wolfe patent, the cell sections are pressed together to hold the sensing diaphragm in position. Smoot Tr. 500; SMAR Exh. 6.

F71. In the pressure transmitter disclosed in the Wolfe patent, plates hold the insulation sections together. Smoot Tr. 500.

F72. In the pressure transmitter disclosed in the Wolfe patent, a resilient ring is positioned over the plates which hold the insulation sections together. Smoot Tr. 501.

F73. In the pressure transmitter disclosed in the Wolfe patent, the force applied to the cell sections is transmitted from the threaded ring through the resilient ring and plate onto the cell sections. Smoot Tr. 503.

F74. The Wolfe patent discloses a housing outside of the insulating material sections. Smoot Tr. 487.

F75. In the Wolfe patent, the pressure sensitive portion of the instrument includes an inner housing which is cylindrical in shape and has an inwardly extending flange. Smoot Tr. 488; SMAR Exh. 6, Col. 6, Line 5.

F76. The pressure transmitter disclosed in the Wolfe patent includes a sensing diaphragm between the two concave surfaces. Smoot Tr. 493.

F77. The '413 patent discloses means for clamping the cell sections together which includes a structure with bolts. Smoot Tr. 504.

F78. The pressure transmitter produced pursuant to the '413 patent includes a retainer ring having a threaded portion or bolts. Smoot Tr. 504.

F79. In the pressure transmitter of the '413 patent, the ring is structurally attached with a weld. Smoot Tr. 505.

F80. The Wolfe patent does not teach a second (isolation) chamber, a fluid passage means between the first and second chambers of each cell section, filling the first and second chambers with fluid to transmit pressure on the second diaphragm to the sensing diaphragm, providing a wall member, clamping the cell sections together against a wall member, or providing outer

housings, nor does the Wolfe patent disclose how to support the outer housing against the cell sections without substantially changing the clamping stress. Smoot Tr. 599-600.

F81. The pressure transmitter disclosed in the Wolfe patent uses capacitance, but the dielectric space, which is the space between the fixed capacitor plate and the moving diaphragm, is not filled with any specified fluid. Therefore, the Wolfe pressure transmitter does not qualify as an industrial type pressure transmitter for use with various fluids and it does not have a structure which would withstand the pressures of industrial usage. Smoot Tr. 613.

F82. The Wolfe patent does not disclose any isolation diaphragms or second isolation chambers. Smoot Tr. 613.

F83. The Wolfe patent does not disclose the massive metal housing of the '413 patent, but instead shows insulating housings to hold the diaphragm. Smoot Tr. 614.

F84. The difference between the clamping means of the Wolfe patent and the '413 patent is that the pressure transmitter disclosed in the Wolfe patent has a spring-loaded clamp which operates through a ring which contacts the insulating material only at the outer periphery to hold the diaphragm in place. The '413 patent discloses the diaphragm welded into place with

massive metal rings welded in the same joint. The '413 patent also discloses a spring ring. The purpose of the spring ring is to hold the massive metal parts together to squeeze the joint in addition to the weld, and to do that in such a way that other forces from large outer housings cannot change the clamping force on the massive metal upper and lower housings. Smoot Tr. 614.

F85. The Wolfe patent discloses elastomer rings which provide some shock mount and isolate the low pressure inner assembly from handling stresses so that the entire inner assembly is cushioned by some elastomer sections. Smoot Tr. 614.

F86. The capacitor in the pressure transmitter disclosed in the Wolfe patent is quite similar to the capacitor disclosed in the '413 patent except that instead of using oil as the dielectric, the Wolfe patent uses the fluid being processed. Process fluid is used because there is no isolation diaphragm and there is no change in media between the connection to the outside world and the substance within the capacitor itself. Since the dielectric changes with the process fluid, the performance of the sensor changes without regard for changes in the differential pressure. This makes the Wolfe sensor less accurate in industrial applications. Smoot Tr. 615.

F87. SMAR

A-15

Smoot Tr. 468-69.

F88. SMAR

C

Smoot Tr. 462-64.

F89. Pursuant to Claim 4 of the '413 patent, SMAR makes differential pressure transducers having sensing cells of the capacitive type having glass or ceramic as insulating material and having outer housings forming a pair of pressure chambers, using a method which:

A&B. provides two sensing cell sections, each of the cell sections having a first chamber defined in one surface, a spaced second chamber and fluid passage means extending between the first and second chambers of each cell section,

C. places a sensing diaphragm between the cell sections to close both of the first chambers,

D. closes each of the second chambers with second diaphragms,

E. fills the first and second chambers and the fluid passage means on each cell section with fluid to transmit pressure on the second diaphragm to the sensing diaphragm,

F. provides a wall member,

G. clamps the sensing cell sections together against the wall member so that the sensing diaphragm is clamped at a first clamping stress level, and

H. clamps the outer housing to support portions of the wall member other than those clamping the sensing cell sections to mechanically support the outer housing on the support portions at a desired clamping force before the outer housing is pressed against the cell sections to thereby support the outer housing without substantially changing the clamping stress on the diaphragm. Smoot Tr. 462-69; 486-505; 561; 599-600; 613-15.

CERTIFICATE OF SERVICE

I, Kenneth R. Mason, hereby certify that the attached COMMISSION OPINION was served upon Deborah Kline, Esq. and upon the following parties via first class mail, and air mail where necessary on April 10, 1990.

Kenneth R. Mason, Secretary
U.S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

For Complainant: Rosemount, Inc.

John F. Flannery
R. S. Pinkstaff
FITCH, EVEN, TABIN & FLANNERY
135 South LaSalle Street
Chicago, IL 60603-4277

Nickolas E. Westman
KINNEY & LANGE, P.A.
Suite 1500
625 Fourth Avenue South
Minneapolis, MN 55415

Paul Plaia, Jr.
Cecilia H. Gonzalez
Jennifer Rie
HOWREY & SIMON
1730 Pennsylvania Ave., N.W.
Washington, D.C. 20006-4793

For Respondents: SMAR Equipment and SMAR Internatioanl Corporation.

Larry Klayman, Esq.
John D. Steffan, Esq.
Leo Aubel, Esq.
Frederick J. Sujat, Esq.
Karen S. Snow, Esq.
Jeffrey A. Orr, Esq.
KLAYMAN & ASSOCIATES, P.C.
501 School Street, S.W.
Suite 700
Washington, D.C. 20024

Government Agencies:

Mr. Charles S. Stark
Antitrust Div./U.S. Dept. of Justice
Room 3264, Main Justice
Pennsylvania Avenue & Tenth Street, N.W.
Washington, D.C. 20530

Edward F. Glynn, Jr., Esq.
Asst. Director (International)
Bureau of Competition
Federal Trade Commission
Room 2636
601 Pennsylvania Avenue, N.W.
Washington, D.C. 20580

Darrel J. Grinstead, Esq.
Dept of Health and Human Services
Room 5362, North Building
330 Independence Avenue, S.W.
Washington, D.C. 20201

Michael T. Schmitz
Chief Counsel
U.S. Customs Service
1301 Constitution Avenue, N.W.
Washington, D.C. 20229

P U B L I C V E R S I O N

UNITED STATES INTERNATIONAL TRADE COMMISSION
Washington, D.C. 20436

In the Matter of	
CERTAIN PRESSURE TRANSMITTERS	Investigation No. 337-TA-304

INITIAL DETERMINATION ON MOTION FOR TEMPORARY RELIEF

PROCEDURAL HISTORY

On September 15, 1989, Rosemount Inc. filed a complaint and a motion for temporary relief with the International Trade Commission alleging violations of Section 337 of the Tariff Act of 1930 as amended (19 U.S.C. § 1337) in connection with the importation of certain pressure transmitters. The complaint as supplemented alleged as unfair acts infringement of U.S. Letters Patent 3,800,413.

On October 17, 1989, the Commission issued a notice of investigation that was published in the Federal Register on October 20, 1989. (54 Fed. Reg. 43145.) The notice instituted an investigation to determine:

> whether there is a violation of subsection (a)(1)(B)(ii) of section 337 in the importation and sale within the United States of certain pressure transmitters made abroad by a process covered by claims 1, 2, 3 and 4 of U.S. Letters Patent 3,800,413, and whether there exists an industry in the United States as required by subsection (a)(2) of section 337.

Pursuant to Section 210.24(e)(8) of the Commission's rules, the motion for temporary relief was referred to an administrative law judge for an initial determination.

Complainant Rosemount, Inc. is a Minnesota corporation with its offices at 12001 Technology Drive, Eden Prairie, Minnesota 55344. The respondents are SMAR Equipment, Rua Guilherme Bolte 1422, Sertaozianno, Sao Paulo, Brazil, and SMAR International Corporation, 3505 Veterans Highway, Suite C, Ronkonkoma, New York 11779.

A four day hearing on temporary relief was completed on November 30, 1989. All parties participated in the hearing and briefed the issues.

JURISDICTION

The Commission has jurisdiction over the subject matter of this case (set forth in the notice of investigation) under Section 337 of the Tariff Act as amended. The parties consented to the Commission's personal jurisdiction over them because all parties litigated the issues.

THE '413 PATENT

The '413 patent is a process patent relating to differential pressure transducers of the capacitor type. The inventor, Roger L. Frick, filed an application on July 26, 1971 that resulted in the '413 patent. This application was a division of an earlier application filed on October 27, 1969, that resulted in the issuance of the '390 product patent on November 9, 1971. (SMAR Ex. 5, Tr. 484.)

The '390 patent discloses a differential pressure transducer of the capacitor type, and the '413 patent claims the process by which it is made. The product measures the flow of fluids or gases, and it is used in many manufacturing processes. A common way in which it is used is to measure

flow in a pipe. Flow is measured by putting an obstruction into the pipe, causing the flow to have higher pressure upstream than downstream of the obstruction. The difference between the upstream and downstream pressure is directly related to flow rate. The differential pressure transmitter has one inlet for the upstream flow and another inlet for the downstream flow. By measuring the difference between the pressure in the upstream and the downstream flow, the differential pressure transmitter can produce an electrical signal telling someone at a remote place what the rate of flow in the pipe is. (Tr. 13, 14, 382.)

The differential pressure transducer disclosed in the '390 patent includes a central chamber filled with oil. The central chamber is divided in half by a flexible metal sensing diaphragm welded in place to keep the oil on one side of the central chamber away from the oil on the other side, and thus forming two sensing chambers (48 and 49 in Fig. 4). Tubes lead from each sensing chamber through the side of the chamber to an outer wall where there is a "second chamber" or "isolation chamber" corresponding to each of the sensing chambers. A metal isolation diaphragm (a "second diaphragm", 44 and 45 in Fig. 4) closes off each isolation chamber. The isolation diaphragms are welded into place to provide a completely sealed unit, keeping the fluid to be sensed (in chambers 21 and 22, Fig. 2) separate from the oil in the sensing unit. The central sensing chambers, the isolation chambers, and the tubes connecting each sensing chamber to its corresponding isolation chamber are filled with oil.

The pressure in the outer chambers (21 and 22) is sensed through the corresponding isolation diaphragms, which flex easily. (Col. 3, line 49.) Movements of the isolation diaphragms are communicated through the oil in

the isolation chambers and in the tubes leading to the central sensing chambers, where the movement is sensed by the sensing diaphragm.

The sensing chamber with higher pressure pushes the sensing diaphragm slightly into the other chamber. Each sensing chamber is slightly concave opposite the sensing diaphragm, like a shallow dish. (See Figure 2.) Any excessive differential pressure on the sensing diaphragm causes the sensing diaphragm to bottom out gently against one of the concave walls, where it would be supported. The central sensing chamber is set into a massive metal housing that increases stability. The glass portion making up the concave side of the central chamber is fused to this metal housing.

The flexible metal sensing diaphragm dividing the two sensing chambers forms one central capacitor plate. The opposite (concave) wall of each sensing chamber is covered with a thin metal coating, forming a rigid second capacitor plate. (Col. 3, lines 12-13.) Each second capacitor makes electrical contact with the walls of the tubes 34 which lead to the read-out circuitry outside of the device. (These tubes also are used to fill the device with oil before it is sealed.)

To measure the differential pressure in the two outside chambers, a measurement is made of the capacitance between the first capacitor and each of the fixed second capacitors in the sensing chambers. As the flexible central capacitor moves in response to the pressure being sensed, the capacitance in each of the sensing chambers varies. When the distance between the two capacitor plates on one side becomes smaller than the distance between the two capacitor plates on the other side, the differential pressure in the flow can be measured by the change in capacitance. This change is recorded by a signal carried through the tubes

used to fill the central chambers with oil, which have metal sides and also function to carry the signal from the second capacitors to the read-out circuitry.

The '413 patent describes the steps by which this product can be made. In claims 1-4 the process steps are described in more general terms than the specific product depicted in the figures of the patent. Claims 1-4 are set forth in Appendix A.

There is a domestic industry practicing the '413 patent. About [C] of Rosemount's pressure transmitters are made by a process claimed in the '413 patent. (Tr. 94, 119, 19.) Rosemount has made significant investments in plant, equipment, labor and capital in practicing this patent. (Rosemount Exs. 27, 29, 34, 41-44, Tr. 93, 99.)

REASON TO BELIEVE THAT A VIOLATION OF SECTION 337 EXISTS

Section 337(e), 19 U.S.C. §1337(e), provides that if the Commission, during the course of an investigation, determines that there is reason to believe that there is a violation of Section 337, it may direct that certain articles be excluded from entry into the United States, unless, after considering the public interest factors listed in 19 U.S.C. §1337(e)(1), it finds that such articles should not be excluded. Articles excluded by a Commission temporary exclusion order (TEO) may be imported under a bond set by the Commission.

When a complainant seeks temporary relief, the Commission requires that the following four equitable factors be considered: (1) the likelihood of success on the merits, (2) the harm that would be caused to complainant if temporary relief were not given, (3) the harm that would be

caused to respondents if temporary relief were given, and (4) the public interest.

1. LIKELIHOOD OF SUCCESS ON THE MERITS

A. Obviousness under Section 103

Respondents contend that the '413 patent is invalid for obviousness under Section 103 of the Patent Act. The issue under Section 103 is whether the process claimed in the '413 patent would have been obvious to one with ordinary skill in the art in 1969.

In Graham v. John Deere Co., 383 U.S. 1, 17-18, 148 U.S.P.Q. 459, 467 (1966), the Supreme Court required that certain factual inquiries be made before a determination of obviousness is made:

> Under Section 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy.

The application that resulted in the '390 and '413 patents was filed on October 27, 1969, and no earlier date of invention is claimed.

Under Section 103, prior art before October 27, 1969 and the level of ordinary skill in the art as of that date can be considered. The pertinent art relates to differential pressure transducers.

There is little evidence in the record as to what a hypothetical person with ordinary skill in the pertinent art would have known in 1969. (No witness of the complainant can qualify as the hypothetical person with

ordinary skill in the art in 1969. Such a person is deemed to have been aware of all relevant prior art before October 27, 1969.) There was some testimony that the hypothetical person with ordinary skill in the art in 1969 would have been a college graduate with a bachelor's degree in engineering or physics, (Tr. 180, 566), but I doubt that a formal education in engineering or physics would be essential for one to have ordinary skill in the art of differential pressure transducers. One with ordinary skill in the art in 1969 also could have been someone who had hands-on experience working with differential pressure transducers.

Column 1 of the '413 and the '390 patent describes the solutions offered by this invention to the practical problems encountered in connection with prior art differential pressure sensors, problems such as overpressure and lack of stability. One who worked with pressure transducers of the capacitor type would have known that oil expands when it is heated, that sudden bursts of pressure could injure the sensing diaphragm, and that prior art differential sensors were unstable. The invention as described in the patent specification offered solutions to practical problems that would have been encountered by one working with these devices, solutions such as the use of a heavier housing, separating the central chamber where the sensing diaphragm was from the fluid to be measured, using the filling tubes as the wire to the outside circuitry, and using the sides of the central chamber to allow the sensing diaphragm to bottom out gently in case of overpressure.

The '413 patent uses some major elements known in the prior art but they are used in a combination that so far, respondents have not been able to prove were either taught or suggested in the prior art. Respondents

have this burden of proof because of the statutory presumption of patent validity under the Patent Act (35 U.S.C. Section 282).

To prove obviousness under Section 103, respondents rely upon prior art pressure transducers of the capacitor type that were known and had been sold to the aerospace industry before 1969, (Tr. 185, 390), and upon four prior art patents:

1. The Prell '719 patent
2. The Wolfe '386 patent
3. The Coon '769 patent, and
4. The Wolfe '385 patent

The record does not show what the pressure transducers sold to the aerospace industry before 1969 were like.

As for the patents, the Prell patent (SMAR Ex. 7) was not brought to the attention of the patent examiner in the prosecution of the '413 patent, but it was considered by the examiner in connection with the parent application from which this process patent was derived. (SMAR Exs. 2, 5 and 8.) Under Section 707.05 of the Manual of Patent Examining Procedure, the patent examiner of the '413 patent was required to review the prior art considered during the prosecution of the parent application.

The other three patents were considered by the patent examiner in connection with the application for the '413 patent.

The claimed advantages of the '390 and '413 patents over the prior art are disclosed in both patents (Rosemount Ex. 3, SMAR Ex. 2), but the product patent (as well as the process patent) sometimes will be compared to the prior art because the differences in the products sometimes are easy to see. If a certain feature of a product is not disclosed in a patent, then the patent does not suggest a step to make that feature.

The Prell patent (SMAR Ex. 7) discloses a measuring diaphragm in a central chamber and two isolation or seal diaphragms welded to the wall to seal the chamber and exclude the fluid that is being measured. (Col. 1 and 3). The Prell patent discloses filling this chamber with silicone fluid through fill tubes. The seal diaphragms are corrugated so that they move slightly, and the fluid dampens them to reduce the effects of external shock and vibrations. Hermetically sealed electric wires carry the signal to the outside. The metal measuring diaphragm extends across the inner chamber, dividing it into two sides. The first is a high pressure chamber and the second is a low pressure chamber. (Col. 3.) The unit that measures the pressure is located in one side of the chamber.

The Prell patent uses a diaphragm type variable-reluctance pressure transducer (Tr. 563-564), but the capacitor type used in the '413 patent was disclosed in other prior art patents. (Tr. 495-7 and 612.)

The Prell patent does not disclose the steps for making the two isolation chambers (or second chambers) of the '390 patent. The Prell patent does not disclose the heavy metal housing filled with insulating material (glass) and covered with metallic film to form the sides of the central chamber. (Tr. 613.) The '390 patent uses a single sensing diaphragm to sense the differential pressure, while the Prell patent uses a separate sensing unit on one side of the central chamber. In the '390 patent the tubes that are used to fill the cavities with oil are also used as electrical conductors for the capacitor plate in the sensing cell. In Prell, separate wiring to the outside is required. In Prell, when there is too much pressure, the seal diaphragms bottom out against the wall surface, preventing damage to the measuring diaphragm. In the '390 patent, the

sensing diaphragm bottoms out before the isolation diaphragms are affected, offering more protection against damage to the sensing diaphragm from too much pressure.

Other prior art patents (such as the Wolfe '386 patent and the Coon patent) disclose the diaphragm-type capacitance transducer of the '390 patent.

The Wolfe '386 patent discloses a capacitor-type pressure sensor, and the use of diaphragm motion to measure pressure differentials. This patent discloses a diaphragm stretched across an inner chamber with slightly concave sides. It does not disclose forming a second chamber, closing the second chamber, providing fluid passageways and filling them with fluid, providing more than one massive metal housing section, filling the cavity with insulation material and fusing it to a metal surface, forming a concave surface in the insulation material after fusion, enclosing the concave surface with a sensing diaphragm sealed to one housing section (Tr. 617), or providing tubes for filling the chamber with fluid and for an electrical connection to the fixed capacitor plates.

The Coon patent (SMAR Ex. 5, attachment) discloses the fusing of glass to the metal housing, but it does not disclose providing isolation diaphragms, or other steps of the '413 patent claims.

The fourth patent, the Wolfe '385 patent, (SMAR Ex. 5, attachment) discloses a flexible system for clamping two pressure sensor cells together using a spring (Col. 2), but it does not disclose all of the other steps of claim 4.

Claim 4 has one section claiming process steps that do not include the step of fusing the glass to the metal housing, and a second section

relating to clamping the sensor unit to the outer housing without substantially changing the clamping stress on the diaphragm. The clamping steps by themselves would have been obvious over the prior art Wolfe '385 patent, but as yet there is no evidence that the other process steps of claim 4 would have been obvious to one with ordinary skill in the art. The other steps recited in claim 4 are fairly close to the steps necessary to make the product of the Prell patent. The differences are that Prell does not disclose a capacitive pressure transducer as the diaphragm dividing the two sides of the inner chamber, or a second chamber spaced from the inner chamber and reached by tubes filled with fluid.

The four patents relied upon by respondents disclose many but not all of the individual elements of claims 1-4. They do not disclose the combinations of the prior art that are claimed in the '413 patent.

Up to this point, respondents have not proved that the combination of process steps in claims 1-4 of the '413 patent were taught or suggested by the prior art or that they would have been obvious to one with ordinary skill in the art in 1969.

There is a likelihood that complainant will be able to prove that secondary considerations, such as success of the apparatus claimed in the related '390 patent (now expired), which probably resulted in the licenses taken by other companies on the '413 patent, will support the position that claims 1-4 of the '413 patent are valid.

B. Infringement

Respondents make two types of capacitance pressure transducers. One is a fused-glass sensor and the other is a ceramic-filled sensor. Complainant alleges that respondents' glass sensor infringes all 4 claims

of the '413 patent, and that respondents' ceramic sensor infringes claims 1, 3 and 4.

Claims 1-3 require the step of filling a cavity with an insulation material and fusing that material to the metal surfaces defining said cavity. In respondents' glass sensor, glass is used to fill the cavity, and the glass is fused to the metal. The glass sensors infringe claims 1-3. All of the steps in each of these claims is found in respondents' process for making glass sensors.

To determine whether the ceramic sensors infringe the patent, the doctrine of equivalents must be considered. The '413 patent is not a pioneer patent. It combines major elements found in the prior art, and adds minor novel improvements. Nevertheless, based on what is now in the record, both the '413 patent and the '390 product patent reflect an important advance in the art because the combination was useful and improved the performance of differential pressure transducers in the prior art. (Tr. 188, 391-392.) Under the doctrine of equivalents, the '413 patent would be entitled to a fairly broad range of equivalents.

The '413 patent is a process patent, and fusing is a process clearly distinguishable from other processes that may achieve similar results. The advantages of fusing the glass to the metal are discussed in the patent. (Col. 5, line 9.) While the method of bonding one part to another might not have been important to the '390 product patent, using the fusing step described in claim 1-3, rather than a substituted method of bonding, is more important in a process patent than it would be in a product patent.

In respondents' ceramic sensor, the glass is not fused to the metal housing. The ceramic is [CONFIDENTIAL]

[CONFIDENTIAL]

[CONFIDENTIAL]

[C]

It is found that respondents' process for making ceramic sensors does not literally infringe claim 1 or claim 3, nor does it infringe these claims under the doctrine of equivalents. The [C] performs the same function as fusing, i.e., binding two parts together, but it achieves this by a substantially different process step. In column 2 of the '413 patent the fusing step is specifically described as taking place in a furnace. [C] seals without heat.

The other elements of claims 1 and 3 are found in the ceramic sensor under the doctrine of equivalents. The hole in the ring-shaped metal housing in the ceramic sensor is the equivalent of the internal cavity required by claims 1 and 3. This internal cavity is [C] [C]

Both the process for making respondents' glass sensors and the process for making respondents' ceramic sensors infringe claim 4 literally and under the doctrine of equivalents.

Figure 3 and column 4 in the '413 patent disclose a number of cap screws around the circumference of a retainer ring that surrounds the center sensing cell. These cap screws secure the retainer ring to an annular ring that is welded to the housing section. The cap screws bolt the center sensing cell to the housing without substantially changing the pressure on the central diaphragm sensor. Respondents argue that the cap screws rigidly attach the two parts together, while their own system

flexibly attaches the two parts together, avoiding sheer stress. Complainant argues that its bolts are flexible and avoid sheer stress.

Respondents use [C] instead of bolting the retainer ring to the annular ring. The process of [C] should reduce sheer stress more than the clamping structure depicted in the '413 patent. Respondents are using a clamping system closer to that taught by the Wolfe patent than to the clamping system disclosed in the '413 patent, but claim 4 makes no distinction between rigid and flexible clamping, and it can encompass both.

Respondents argue that complainant is barred from arguing that claim 4 is infringed because of the doctrine of prosecution history estoppel. Under that doctrine, the applicant cannot distinguish specific prior art from his claim to get his claim allowed, and then argue that someone following that prior art is infringing the applicant's claim.

During the patent prosecution, the applicant did not try to distinguish the prior art Wolfe '385 patent on the basis that Wolfe disclosed a resilient clamping structure rather than rigid clamping. In the prosecution history, claim 21 (which became claim 4) was amended to overcome the objection of the examiner based on the Wolfe '385 patent. In the amendment the applicant merely added other process steps to this claim, steps that made the amended claim patentable over the Wolfe patent. Prosecution history estoppel is not applicable here.

Claim 4 can be construed to cover flexible clamping of the sensor unit to the housing unit; it is not limited to the specific clamping by cap screws disclosed in the patent specification. Complainant is not prohibited by prosecution history estoppel from arguing that the resilient

clamping step used by respondents infringes claim 4 either literally or under the doctrine of equivalents.

There is reason to believe that:

a. Complainant will be successful in proving that respondents' glass sensors are made by processes that infringe claims 1-4,

b. Complainant will not be successful in proving that respondents' ceramic sensors infringe claims 1-3, and

c. Complainant will be successful in proving that respondents' ceramic sensors infringe claim 4.

These are only tentative findings. Less evidence is required to find reason to believe than would be necessary to find a violation of Section 337 after a full hearing.

At the hearing on permanent relief, perhaps different prior art may be offered. At the hearing on temporary relief, complainant offered no evidence on validity, but relied on the presumption of validity. Respondents brought out some of the prior art in cross-examination of one of complainant's witnesses. This evidence was not rebutted, but at this time I do not think that the prior art before me was enough to show invalidity. All of the prior art patents were before the PTO either in connection with the '413 claims or the '390 claims. I have not seen any contemporary scientific articles or heard testimony as to what others working in this field were doing or what ideas were being exchanged in 1969. There was very little evidence offered about ordinary skill in the art in 1969. I have not yet had enough time to examine the prior art relied upon by respondents carefully enough to understand to my own satisfaction some of the things that one with ordinary skill in the art

would have known in 1969 and what might have been suggested to him by what is disclosed or taught in the prior art.

2. HARM TO THE DOMESTIC INDUSTRY

To obtain a preliminary injunction in a federal court one must show irreparable harm. Roper Corp. v. Litton Systems, Inc., 757 F.2d 1266, 225 U.S.P.Q. 345, 348-49 (Fed. Cir. 1985); Smith International, Inc. v. Hughes Tool Co., 718 F.2d 1573, 219 U.S.P.Q. 686, 690 (Fed. Cir. 1983).

In the past the Commission has referred to "immediate and substantial harm." See Commission Rule 210.24(e)(1)(i)(B); Fluidized Supporting Apparatus, 225 U.S.P.Q. at 1213.

To me, these terms do not have the same meaning. Irreparable harm implies harm for which money cannot be adequate compensation; one has lost an eye, or a good name has been tarnished. Substantial harm can be more or less than this. If the English language is not abused, it should be easier to prove substantial harm than it would be to prove irreparable harm, because true irreparable harm is extremely uncommon. Yet these terms are sometimes given the same meaning by the courts and Congress.

The 1988 amendments to § 337 include the provision that the Commission "may grant preliminary relief ... to the same extent as preliminary injunctions and temporary restraining orders may be granted under the Federal Rules of Civil Procedure." 19 U.S.C. § 1337(e)(1)(B)(3). The legislative history relating to the amendment states that this provision "codif[ies] existing [Commission] practice in this regard." S. Rep. No. 71, 100th Cong., 1st Sess. 131 (1987); H.R. Rep. No. 40, 100th Cong., 1st Sess. 159 (1987). This suggests that Congress thinks that the Commission has been requiring proof of irreparable harm to support temporary relief,

and wants the Commission to continue to do so. The Federal Circuit takes findings of substantial harm and uses them to find irreparable harm. Although I have trouble equating the two terms, I now understand that Congress and the Federal Circuit want irreparable harm to be the factor that must be balanced with the other factors in connection with temporary relief.

If validity and continuing infringement of a patent have been clearly established, federal courts will presume immediate irreparable harm to the patentee. Smith International, supra, 219 U.S.P.Q. at 692. In order for the presumption to apply, the showing of likelihood of success on validity and infringement must be "not merely a reasonable showing but a strong showing indeed." Roper, supra, 225 U.S.P.Q. at 348. The presumption may be rebutted by clear evidence that irreparable injury would not actually be suffered by the patentee if temporary relief were denied. Id., 225 U.S.P.Q. at 349.

Irreparable harm makes sense to me in the context of patent infringement. Monetary compensation for patent infringement might be an inadequate remedy because the owner of a patent cannot be compelled to license his patent involuntarily, and it would be unfair for the courts rather than the patent owner to fix the terms of the license even if the patent owner were willing to license.

The question then is whether there has been a strong showing of validity and infringement in this case. There has been no prior adjudication of the validity of the patent in issue, nor has there been an admission by respondents of either validity or infringement. Complainant relied upon the statutory presumption of validity, and argument in his

principal and reply briefs after the hearing distinguishing the prior art cited by respondents. Respondents relied only upon prior art patents cited by the patent examiner in connection with the '413 patent or the related '390 patent. There is reason to believe that it is unlikely that the presumption of patent validity will be overcome. I do not know whether this is a strong showing of patent validity. Based on my own experience in hearing patent cases, not very much prior art has been brought to my attention, but respondents have limited resources. Differential pressure transducers were not new in the art in 1969, and I would be surprised if additional relevant prior art could not be found.

If it is assumed that the claims are valid, complainant has made a strong showing of infringement.

The showing of likelihood of success on the merits probably is strong enough to warrant a presumption of irreparable harm because respondents probably lack the financial resources to launch an expensive search for relevant prior art for the hearing on permanent relief. Perhaps they believe that such a search would not be warranted because of the strength of the patent. I do not have any way to determine the strength of the patent without knowing first whether there is better prior art available. With the presumption of irreparable harm, respondents still can try to rebut the presumption.

There is no evidence that respondents' importation of the product in issue at the present time is causing irreparable harm to the domestic industry. Rosemount alleges only one sale lost to respondents: [C] [CONFIDENTIAL] were purchased in January 1989 by [C] in New Jersey. (SMAR Phys. Ex. Q at 17; Tr. 160-

161; SMAR Ex. 25.) The record contains no evidence of [C] [C] Although [C] is a substantial amount, this loss would have little impact on complainant. Moreover, there is no evidence that Rosemount would have made this sale but for SMAR.

Rosemount takes the position that it would have made this sale but for SMAR because Rosemount generally wins [C] of the market share for pressure transmitters, and has a good win ratio on larger projects. (Tr. 173.) If you have a [C] market share, this does not mean that there is a [C] probability that you will obtain any particular order. Complainant has two Japanese licensees who sell these products in the United States and they had a chance of getting this sale. There are also other U.S. competitors selling comparable products. Between January and June 22, 1989, [C] asked for pressure transmitter bids on at least three occasions. Both SMAR and Rosemount submitted bids, but the orders went to three other competitors, including one of Rosemount's Japanese licensees. (Tr. 78, 164-165; SMAR Ex. 33, SMAR Ex. 31 at 100680A, SMAR Ex. 32 at 202644.)

Although Rosemount has not shown that it would have gotten the [C] order but for SMAR's bid, this is not critical to a showing of irreparable injury.

Rosemount first heard of SMAR selling pressure transmitters in the United States shortly after the ISA show in late October of 1988. (Tr. 40-41.) As of July 1989, Rosemount representatives in three out of 20 U.S. sales offices had seen SMAR compete with them, but SMAR has [C] [C] (Tr. 77-78, 164-165; SMAR Ex. 33.)

Rosemount has [C] of the U.S. market share of pressure transmitters. (Tr. 134.) Honeywell is Rosemount's principal competitor,

but Rosemount has not lost market share to Honeywell. Rosemount's sales have grown and continue to grow. (Tr. 172.) Rosemount currently can produce weekly approximately [C] pressure transmitters containing the sensors made by the '413 process. Current average monthly production is approximately [C] units. (SMAR Ex. 38 at 10.) SMAR's maximum capacity is the production of less than [C] per year. (SMAR Ex. 39 at 4.) Rosemount produces more pressure transmitters in one week than SMAR [C] [C]

Rosemount expects to increase its market share over the next four to five years by [C] percentage points. (Tr. 136.) In each year that Rosemount has been selling pressure transmitters with the sensing device at issue there has been substantial growth in sales. (Tr. 104; Rosemount Ex. 41.) Rosemount experienced a growth rate of [C] between fiscal years 87-88 and 88-89. (Tr. 113; SMAR Ex. 20.) For fiscal years 1989 and 1990, it projects [C] in sales for the products in issue. (Tr. 104, 108; SMAR Ex. 18.) Rosemount forecasts a [C] increase in worldwide sales next year of Rosemount pressure transmitters. (Tr. 118.)

Companies that manufacture and sell pressure transmitters in competition with Rosemount in the United States include Honeywell, Foxboro, Bailey, L&N, Gould (Schlumberger), Fish & Porter, Bristol and Tobar. Rosemount's foreign competitors are Fuji, Yokogawa, Kent, Siemens, Hartman, and Braun. (Tr. 130-131.) SMAR is one of Rosemount's [C] competitors. (Tr. 156.)

SMAR International [C] sell or import for sale in the United States [C] pressure transmitters in FY 1988. (SMAR Ex. 39, Response 8(a); SMAR Ex. 41, Response No. 3.) SMAR shipped [C] pressure transmitters

in 1989 (including the [C] ordered in FY 1988) through October 31, 1989. (Rosemount Ex. 20.) SMAR projects total sales for calendar year 1989 to reach about [C] or approximately [C] units. (SMAR Ex. 25 at 3.) This represents [C] than [C] of Rosemount's annual sales of pressure transmitters. (SMAR Ex. 21 at 100965A.)

SMAR Equipment, the Brazilian manufacturer, employs [C] people in the production of pressure transmitters. (SMAR Ex. 39, Response No. 2(e).) Rosemount employs [C] people to produce pressure transmitters. (SMAR Ex. 26 at 101145.)

There was no evidence that Rosemount's '413 licensees have objected to any infringement by SMAR. (Tr. 31.)

There is no doubt that there was harm to complainant when respondents imported and sold differential pressure transducers in the United States. There is reason to believe that respondents infringed a valid patent owned by complainant. The [C] sale to [C] by someone not licensed under the '413 patent constituted harm to complainant in that the value of the patent to complainant and to its licensees was reduced. The patent owner is entitled to the patent monopoly, and he is not obligated to issue involuntary licenses. The loss of [C] did not in itself cause irreparable harm, nor would an additional [C] sales projected by respondents in 1989 cause irreparable harm to complainant. The loss of these amounts would have little impact on complainant. The lost profits could be sought in a district court action for damages.

Irreparable harm would have resulted from the unauthorized use of the patent if nothing had been done about it because the patent would have been less valuable. Those paying royalties might have wondered if that was

necessary, and others wanting to get a license might not have done so. But complainant took legal action. This initial determination finds that there is reason to believe that complainant will be successful both in protecting its patent and in proving infringement. This finding in itself alleviates any harm that might have resulted from respondents' infringement of the patent and any resulting loss in the value of the patent.

It is found that there was harm to complainant, but not substantial harm, or irreparable harm at least at this time. It is found that respondents have rebutted the presumption of irreparable harm.

3. HARM TO THE RESPONDENTS

If temporary relief were imposed, SMAR could be permitted to continue importation of the accused product under bond. In view of the tenuous nature of SMAR's position in the U.S. market and its small market share, the imposition of more than a nominal bond would cause substantial but not irreparable harm to SMAR. There is no evidence that SMAR could not survive the imposition of temporary relief because it has business in other countries. It could resume its efforts to sell in the United States, (assuming that it loses here), upon expiration of the patent in April 1991.

SMAR obtained its first and only order from [C] in November of 1988. (Tr. 357-58.) The U.S. market has accounted for [C] about [C] of SMAR Equipment's sales of pressure transmitters. (Rosemount Ex. 60.)

It is found that the imposition of temporary relief would not cause irreparable harm to SMAR.

4. THE PUBLIC INTEREST

The Federal Circuit has stated that "it is the protection of valid patent and other intellectual property rights that is the principal public policy implemented by § 1337. This policy is reinforced by the recent amendments to 19 U.S.C. § 1337(e), designed, as we have noted, to facilitate preliminary relief." Bristol-Myers Co. v. U.S. International Trade Commission, 1989 WL 147230, unpublished disposition, text in Westlaw (Fed. Cir. 1989).

Because protection of a valid patent is the principal public policy factor here, it is probably not necessary to note that Rosemount can supply the demand for these products, but it can do so. (Tr. 240, 121, 140.)

The staff raises the concern that the public interest will suffer if parties are encouraged to file motions for temporary relief in every case where injury to complainant is as minimal as it is here. I agree. I am concerned about any policy that implies that the patent owner's private interest in his valid patent outweighs all other public interest factors. Nevertheless, the Federal Circuit has made it clear that intellectual property rights are the primary public policy concern in these cases. The public interest concern about increased costs of litigation to the taxpayer caused by TEO proceedings is outweighed by the public policy to protect the private interest in the patent. I would not take the same view if public interests affecting safety, health, or excessive expense to the taxpayer were raised.

BALANCING THE FOUR FACTORS

At this time, there appears to be a strong likelihood that complainant ultimately will succeed on the merits.

There is little evidence that irreparable harm would result to complainant if respondents continued to import or that irreparable harm would result to respondents if temporary relief were given to complainant. Irreparable injury might have been suffered by the complainant if he had not brought this action or one in district court. Even one sale made in the United States impinges on the owner's patent rights and diminishes the value of his patent monopoly to himself as well as to his licensees. Yet once a finding has been made here that the complainant is likely to succeed in the final hearing on the merits, the value of the patent to the owner and the licensees has been reinforced. Any other injury to complainant resulting from any imports that respondents could manage to sell in the next few months could be put in a thimble.

Complainant cites cases that introduce the public interest factor into the consideration of relative harm, before the balancing of the factors takes place. Complainant will win when the factors are balanced fairly.

The dominant public interest factor favors the complainant. The factor of likelihood of success on the merits (which goes to the underlying question of whether there is likely to be a valid patent right to protect) has been decided in favor of complainant.

In the absence of a finding of irreparable injury to either side if it loses, or a finding of a likelihood that complainant ultimately would not succeed on the merits, the public interest factor carries the day. Temporary relief is warranted.

BONDING

Complainant should be required to post a bond of 5 per cent of its annual sales revenues and licensing royalties from the domestic product at

issue as a prerequisite to the issuance of a temporary exclusion order, for the reasons stated in the staff's brief.

Rosemount's sales of electronic pressure transmitters for fiscal year 1989 were [C] (Tr. 113; SMAR Ex. 20.) Rosemount received [C] in royalties in the first half of fiscal year 1989, and expected to receive [C] in all of FY 89. (Rosemount Ex. 34.)

FORM OF TEMPORARY RELIEF

If temporary relief is granted, it should be in the form of a temporary exclusion order letting respondents import under bond. The bond should be minimal. It is expected that complainant would advertise its success in getting temporary relief to potential customers of respondents and that few if any sales would be made.

CONCLUSIONS

It is found that there is reason to believe that a violation of Section 337 has occurred in connection with the importation of respondents' glass-fused sensors and respondents' ceramic sensors. It is found that temporary relief is warranted.

Findings of fact F1-F31 and F64-F89, proposed by the Commission investigative staff, are adopted for the purposes of this decision on temporary relief.

The evidentiary record in this proceeding consists of the following exhibits:

> Rosemount Documentary Exs. 1-14, 16-58, 59A and 59B, 60-64,
> Rosemount Physical Exs. A-K, M-R, T-Z, AA-AD, and AG-AI,
> SMAR Exs. 1, 2, 4-13, 14B-14G, 14I, 15-33, 35-43, and 45-52, and
> SMAR Physical Exs. A-G, H1-H5, I, J, M, Q, R, U-Y, and AA.

The evidentiary record also includes the transcript of the testimony at the hearing. The evidentiary record is hereby certified to the Commission.[1] The pleadings record also includes all papers and requests properly filed with the Secretary in this proceeding.

Janet D. Saxon

Janet D. Saxon
Chief Administrative Law Judge

Issued: December 29, 1989

[1]Pursuant to 19 C.F.R. § 210.53(h), this initial determination shall become the determination of the Commission unless a party files a petition for review of the initial determination pursuant to § 210.54, or the Commission pursuant to §210.55 orders on its own a review of the initial determination or certain issues therein. For computation of time in which to file a petition for review, refer to §§ 210.54, 201.14 and 201.16(d).

APPENDIX A

Claims 1-4 are as follows:

1. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, at least one of said sections having an internal cavity, filling said cavity with an insulation material and fusing said material to the metal surfaces defining said cavity, forming a concave surface in said insulation material after it has been fused to the cavity surface, depositing a layer of electrical conductive material on said concave surface to form a first capacitor plate, enclosing the concave surface with a sensing diaphragm sealed to said one housing section to form a sensing chamber, said sensing diaphragm forming a second capacitor plate, forming a second chamber in said one housing section, closing said second chamber with a second diaphragm, providing fluid passage means between said first and second chambers, and filling said first and second chambers and said fluid passage means with a fluid to transmit pressure on said second diaphragm to said sensing diaphragm.

2. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, each of said housing sections having an internal cavity, filling said cavities with an insulation material and fusing said material to the metal surfaces defining said cavities, forming concave surfaces in said insulation material, providing electrically conductive tubular members opening to said concave surfaces and passing out the walls of said housing sections, depositing a separate layer of electrical conductive material on each of said concave surfaces electrically connected to said tubular members, sealing said sensing diaphragm means to said housing sections to form first and second sensing chambers, said housing sections having isolation chambers defined therein with isolation diaphragm means, providing fluid passage means opening between each of said isolation chambers and a corresponding sensing chamber, filling said isolation chambers, said fluid passage means and said sensing chambers with a fluid through said tubular members sealing said tubular members after the filling step, and connecting electrical lead means to said tubular members after they have been sealed.

3. A method of constructing a pressure sensing cell assembly of the capacitor type including the steps of providing massive metal housing sections, at least one of said sections having an internal cavity, filling said cavity with an insulation material and fusing said material to the metal surfaces defining said cavity, forming a concave surface in said insulation material after it has been fused to the cavity surface, depositing a layer of electrical conductive material on said concave surface to form a first capacitor plate, enclosing the concave surface with a sensing diaphragm sealed to said one housing section, said sensing diaphragm forming a second capacitor plate, providing a second chamber closed by a second diaphragm on said one section providing fluid passage means between the area enclosed between the concave surface and the sensing diaphragm and said second chamber, filling said second chamber, said fluid passage means and the area enclosed by said sensing diaphragm with fluid to transmit pressure on said second diaphragm to said sensing diaphragm.

4. A method of making a differential capacitive pressure transducer having a sensing cell of the capacitive type and an outer housing forming a pair of pressure chambers, including the steps of providing two sensing cell sections, each of said cell sections having a first chamber defined in one surface thereof, a spaced second chamber and fluid passage means extending between said first and second chambers of each cell section, placing a sensing diaphragm between said cell sections to close both of said first chambers, closing each of said second chambers with second diaphragms, filling said first and second chambers and said fluid passage means on each cell section with fluid to transmit pressure on said second diaphragm to said sensing diaphragm, providing a wall member, clamping said sensing cell sections together against said wall member so that said sensing diaphragm is clamped at a first clamping stress level, and clamping said outer housing to support portions of said wall member other than those clamping the sensing cell sections to mechanically support said outer housing on the support portions at a desired clamping force before the outer housing is pressed against said cell sections to thereby support said outer housing without substantially changing the clamping stress on said diaphragm.

CERTIFICATE OF SERVICE

I, Kenneth R. Mason, hereby certify that the attached Public Version Initial Determination was served by hand upon Deborah J. Kline, Esq., and upon the following parties via first class mail, and air mail where necessary, on January 3, 1990.

Kenneth R. Mason

Kenneth R. Mason, Secretary
U.S. International Trade Commission
500 E Street, S.W.
Washington, D.C. 20436

For Complainant Rosemount Inc.:

John F. Flannery, Esq.
R. Steven Pinkstaff, Esq.
FITCH, EVEN, TABIN & FLANNERY
135 South LaSalle Street
Chicago, Illinois 60603-4277

Nickolas E. Westman, Esq.
KINNEY & LANGE, P.A.
Suite 1500
625 Fourth Avenue South
Minneapolis, Minnesota 55415

Paul Plaia, Jr., Esq.
Cecilia H. Gonzalez, Esq.
HOWREY & SIMON
1730 Pennsylvania Avenue, N.W.
Washington, D.C. 20006-4793

For Respondents SMAR Equipment and SMAR International Corporation:

Larry Klayman, Esq.
Leo Aubel, Esq.
KLAYMAN & ASSOCIATES, P.C.
501 School Street, S.W.
Suite 700
Washington, D.C. 20024