

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

P & M PRODUCTS, LTD., et al. : CIVIL ACTION
: :
v. : :
: :
ROSE ART INDUSTRIES : NO. 01-231

MEMORANDUM

Padova, J.

March , 2002

Plaintiffs, Terrence Bolton, P&M Products Ltd. and P&M Products USA (collectively "P&M") filed this patent infringement action on January 16, 2001. Plaintiffs allege that Rose Art Industries ("Rose Art") infringes two United States patents held by Bolton by importing, selling and making in the United States art supplies that fall within the scope of Bolton's patents without their consent. The parties seek to have the Court construe twenty-three disputed claim terms from the two patents pursuant to Markman v. Westview Instruments, Inc., 517 U.S. 370 (1996) (holding that the construction of the terms in a patent is an issue for the judge, not the jury). The Court held a Markman hearing on January 31, 2002.

I. BACKGROUND

Plaintiffs allege that Defendant Rose Art infringes on two patents, Patent No. 5,687,886 (the "'886 patent") and Patent No. 6,024,300 (the "'300 patent"), which disclose lung-powered airbrushes that dispense a fine spray of liquid particles from conventional felt-tipped marker pens. Bolton, a toy developer, developed these patents in order to make simple airbrushes that

could be used by children and amateur artists. Bolton's innovation was to change the way air is delivered to the airbrush to create a spray of ink. In both the '886 and '300 patents, the air is blown into the airbrush by mouth by the airbrush user, rather than being delivered by an external mechanical device. P&M Products, Ltd. is a U.K. corporation which manufactures art supplies and is the exclusive licensee of both patents. Plaintiff P&M Products USA, Inc. is P&M Products, Ltd.'s wholly-owned U.S. subsidiary and is the exclusive U.S. sub-licensee of Bolton's patents. The licensed commercial embodiments of the patents made by P&M are "Blopens," a children's airbrush toy. Rose Art makes an airbrush toy which P&M claims infringes on claims 1, 4, 5 and 6 of the '886 patent and claims 1, 2, 3 and 4 of the '300 patent.

The '886 patent describes two preferred embodiments.¹ In one embodiment, illustrated by figures ("figs.") 1 and 4, the reservoir pen, an ordinary felt-tipped marker which provides ink for the airbrush, appears to be completely encased by an external housing. ('886 patent, figs. 1 and 4.) In the figs. 1 and 4 embodiment of the patent, the mouthpiece, where air is blown into the housing is on the opposite end of the housing from the nozzle, where ink exits the housing. ('886 patent, figs. 1 and 4.) In another embodiment, illustrated by fig. 8, approximately half of

¹The two embodiments are illustrated by figures 1, 4 and 8 of the '886 patent which are reproduced in the Appendix to this Memorandum.

the reservoir pen (including the nib) sits inside of the housing, the remainder of the pen protrudes from an open end of the housing. ('886 patent, fig. 8.) In this embodiment, the mouthpiece is not at the opposite end of the housing from the nozzle, but is the free end of a tube connected to the side of the housing. ('886 patent, fig. 8.)

II. PRINCIPLES OF CLAIM CONSTRUCTION

The first step in determining whether a patent has been infringed is construction of "any disputed terms and limiting expressions in the [asserted claims]." Vivid Technologies, Inc. v. American Science, 200 F.3d 795, 803 (Fed. Cir. 1999). "Claim construction is a matter of resolution of disputed meanings and technical scope, to clarify and when necessary to explain what the patentee covered by the claims, for use in the determination of infringement." U.S. Surgical Corp. v. Ethicon, Inc., 103 F.3d 1554, 1568 (Fed. Cir. 1997). Claim terms are to be construed as they are understood by someone with education, training, or experience in the field. Multiform Desiccants, Inc. v. Medzam Ltd., 133 F.3d 1473, 1477 (Fed. Cir. 1998) ("It is the person of ordinary skill in the field of the invention through whose eyes the claims are construed. . . . The inventor's words that are used to describe the invention - the inventor's lexicography - must be understood and interpreted by the court as they would be understood and interpreted by a person in that field of technology."). The

parties agree that a person with education, training or experience in mechanical engineering or the design of airbrushes would be one of ordinary skill in the field through whose eyes the claims at issue in this case should be construed.

In construing a claim, the Court first looks at intrinsic evidence, i.e., the language of the patent, including the specifications as well as the claims themselves, and the prosecution history of the patent. Vitronics Corp. v. Conceptronic, Inc., 90 F.3d 1576, 1582 (Fed. Cir. 1996). The language of the claim is the most important element of this analysis:

First, we look to the claim language. Then we look to the rest of the intrinsic evidence, beginning with the specification and concluding with the prosecution history, if in evidence. If the claim language is clear on its face, then our consideration of the rest of the intrinsic evidence is restricted to determining if a deviation from the clear language of the claims is specified. A deviation may be necessary if a patentee has chosen to be his own lexicographer and use terms in a manner other than their ordinary meaning. A deviation may also be necessary if a patentee has relinquished [a] potential claim construction in an amendment to the claim or in an argument to overcome or distinguish a reference. If however the claim language is not clear on its face, then our consideration of the rest of the intrinsic evidence is directed to resolving, if possible, the lack of clarity.

Interactive Gift Exp., Inc. v. Compuserve Inc., 256 F.3d 1323, 1332 (Fed. Cir. 2001) (citations omitted). Extrinsic evidence may only

be considered if the disputed claim terms cannot be construed by the use of intrinsic evidence alone. "Relying on extrinsic evidence to construe a claim is proper only when the claim language remains genuinely ambiguous after consideration of the intrinsic evidence." Id. at 1332 (internal quotation omitted). If extrinsic evidence is necessary to construe a claim, dictionaries may be used. Bell Atlantic Network Serv. v. Covad Commun. Group, Inc., 262 F.3d 1258, 1267 (Fed. Cir. 2001). If the Court needs additional extrinsic evidence, it may look to "expert testimony, articles, and inventor testimony. This extrinsic evidence may be used only to assist in the proper understanding of the disputed limitation; it may not be used to vary, contradict, expand, or limit the claim language from how it is defined, even by implication." Id. at 1269 (citations omitted).

Although the Court should consider the specifications when construing a claim, the Court cannot add "limitations appearing only in the specification." Electro Med. Sys. S.A. v. Cooper Life Sciences, Inc., 34 F.3d 1048, 1054 (Fed. Cir. 1994). The United States Court of Appeals for the Federal Circuit has recognized that "we look to the specification to ascertain the meaning of the claim term as it is used by the inventor in the context of the entirety of his invention, and not merely to limit a claim term." Interactive Gift Express, Inc., 256 F.3d at 1331-32 (citation omitted). In addition, the Court should not limit the

meaning of the claims to the preferred embodiment or to the working embodiment of those claims. Rodime PLC v. Seagate Technology, Inc., 174 F.3d 1294, 1303 (Fed. Cir. 1999); see also Laitram Corp. v. Cambridge Wire Cloth Co., 863 F.2d 855, 865 (Fed. Cir. 1988) (“References to a preferred embodiment, such as those often present in a specification, are not claim limitations.”). However, “[W]here the specification makes clear that the invention does not include a particular feature, that feature is deemed to be outside the reach of the claims of the patent, even though the language of the claims, read without reference to the specification, might be considered broad enough to encompass the feature in question.” SciMed Life Systems, Inc. v. Advanced Cardiovascular Systems, Inc., 242 F.3d 1337, 1341 (Fed. Cir. 2001). The parties have asked the Court to consider the intrinsic evidence of the claim language, the specifications, and the prosecution history of the ‘300 patent. The parties have also submitted extrinsic evidence in the form of dictionary definitions, expert opinions and expert testimony presented during the Markman hearing.

III. DISCUSSION

A. The ‘886 Patent

P&M claims that Rose Art infringes claims 1, 4, 5 and 6 of the ‘886 patent. Claims 4, 5 and 6 are all dependent claims which depend from claim 1, therefore, they incorporate the limitations of

claim 1.² Jeneric/Pentron v. Dillon Co., 205 F.3d 1377, 1383 (Fed. Cir. 2000) ("a dependent claim, by nature, incorporates all the limitations of the claim to which it refers.") (citation omitted).

1. Claim 1

The parties dispute the following emphasized terms in claim 1:

1. Apparatus for dispensing a fine spray of liquid particles, the apparatus comprising:

a **hollow tubular housing** having an inner wall;

a reservoir pen formed with a nib of absorbent material **retained within** and spaced from the inner wall of the housing;

a nozzle including an outlet orifice **at one end** of the tubular housing;

a **mouthpiece at the other end** of the housing through which air can be blown **through the tubular housing and over the pen** to the outlet orifice of the nozzle;

and **means for locating the pen within the housing with its absorbent nib at least partially within the boundary of the outlet orifice of the nozzle.**

²Claims may be written in independent or dependent form as set forth in 32 U.S.C.A. § 112 (West 2001):

A claim may be written in independent or, if the nature of the case admits, in dependent or multiple dependent form.

Subject to the following paragraph, a claim in dependent form shall contain a reference to a claim previously set forth and then specify a further limitation of the subject matter claimed. A claim in dependent form shall be construed to incorporate by reference all the limitations of the claim to which it refers. .

. .

('886 patent, claim 1, emphasis supplied by the parties.)

a. hollow tubular housing

P&M argues that one of ordinary skill in the art of airbrushes would understand this term to mean "an unfilled, or non-solid, approximately tube-shaped body." (Pls. Opening Mem. at 12.) Rose Art argues that someone of ordinary skill in the art would understand "tubular housing" to "describe a hollow cylindrical body that encases the reservoir pen." (Def. Pre-Markman Hr'g Br. at 16-17.)

Nothing in the plain language of claim 1 limits the meaning of this term to "a hollow cylindrical body that encases the reservoir pen." Moreover, this construction of the term is at odds with the patent specification. The words hollow and tubular cannot be construed as cylindrical because figs. 1 and 4 of the '886 patent show that the housing is tapered on both ends and is, therefore, not cylindrical. There is also nothing in the language of the claim or the specifications which requires the housing to completely encase the reservoir pen. In fact, adoption of Rose Art's proposed construction would exclude the fig. 8 preferred embodiment from the patent claims. Although figs. 1 and 4 of the '886 patent illustrate an embodiment in which the reservoir pen appears to be completely encased within the housing, fig. 8 of the '886 patent illustrates an embodiment in which the housing does not encase the pen in its entirety. In fig. 8, approximately one-half

of the reservoir pen protrudes from the open end of the housing opposite the nozzle.

Rose Art contends that fig. 8 is not within the scope of claims of the '886 patent because several of the dependent claims of the patent, namely claims 2 through 5, 7 and 8 clearly claim a different embodiment of the patent. However, dependent claims 6 and 9 speak only to the fig. 8 embodiment of the patent and the specification of the patent specifically describes the fig. 8 embodiment. ('886 patent, col. 3, ll. 12 - 26.) The Court will not construe the '886 patent to exclude the fig. 8 embodiment since it is specifically claimed by the language of the patent and specifically described by the patent specification. Claim construction that would exclude a preferred embodiment "is rarely, if ever, correct and would require highly persuasive evidentiary support." Vitronics Corp., 90 F.3d at 1583-84. Accordingly, the Court construes the term "hollow tubular housing" as "an unfilled, or non-solid, approximately tube-shaped body." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

b. retained within

P&M construes "retained within" to mean "holding at least a portion of." (Pls. Opening Mem. at 14-15.) Rose Art maintains that this term should be construed to describe "a reservoir pen

formed with a nib of absorbent material being held in place or position inside of the 'housing' (i.e., the cylindrical structure that covers the pen)." (Def. Pre-Markman Hr'g Br. at 18.) Rose Art contends that "retained within" should not be construed so as not to require that the entire pen is encased by the tubular housing. (Def. Pre-Markman Hr'g Br. at 19.)

As discussed in detail above, the claim language of the '886 patent cannot be construed to exclude the fig. 8 embodiment. Accordingly, the Court cannot adopt a construction of "retained within" which requires that the reservoir pen be entirely encased within the housing. Vitronics, 90 F.3d at 1583-84. That being said, there is nothing particularly ambiguous about the term "retained within." An examination of the clear language of the claim makes it readily apparent that the term "retained within" describes a reservoir pen which is at least partially held inside of the housing. There is nothing in the specification which would require the Court to deviate from that construction. Consequently, the term "retained within" is construed to mean "holding at least a portion of." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

c. mouthpiece

P&M construes the term "mouthpiece", as used in both the '886 and '300 patents, as "that part of the apparatus which is placed in the mouth to introduce air into the housing where it moves over the pen and out the nozzle's outlet orifice." (Pls. Opening Mem. at 15.) P&M cites the Webster's Third New Int'l Dictionary definition of mouthpiece as "a part which goes in the mouth." (Pls. Opening Mem. at 16.) Rose Art construes "mouthpiece" in both patents as the "piece placed at the mouth for entry of air into the airbrush, but not including connectors (e.g. flexible tubes)." (Def. Pre-Markman Hr'g Br. at 21.) Rose Art supports its argument by citation to extrinsic evidence, namely British Patent 237,278 from 1925 (the "Plasto-Vertrieb patent") which, Rose Art states, claims a mouthpiece which includes only the piece which comes into contact with the mouth and not the flexible tube attached to it. (Def. Pre-Markman Hr'g Br. at 22.) Rose Art contends that a person skilled in the art would understand this prior patent to mean that "mouthpiece" is never used to describe a connector.

The preferred embodiment of the '886 patent which is seen in figs. 1 and 4 has a mouthpiece which may be released or separated from the housing. ('886 patent, col. 4, ll. 22-23.) The fig. 8 preferred embodiment of the '886 patent has a mouthpiece which is the end of a tube connected to the barrel of the housing.

('886 patent, col. 3, ll. 21-22.) The description of fig. 8 in the '886 patent specification states "[c]onnected to one side of the barrel 20 is a tube 26 formed at its free end with a mouth piece 27. In this embodiment, therefore, air is blown through the mouth piece 27 and tube 26 into the barrel 20" ('886 patent, col. 3, ll. 21-24.) Since the mouthpiece on the fig. 8 embodiment is part of the connector, the term "mouthpiece" cannot be construed to exclude connectors. Vitronics, 90 F.3d at 1583-84. Moreover, since the patent does not distinguish between the materials which could be used for this connector, the term cannot be construed to exclude connectors which are made of flexible plastic tubes. In fact, the specification states that the apparatus may "be produced from a variety of materials, one typical material being plastics." ('886 patent, col. 3, ll. 29-30.) Accordingly, the term "mouthpiece" as used in both the '886 and '300 patents is construed as "that part of the apparatus which is placed in the mouth to introduce air into the housing where it moves over the pen and out the nozzle's outlet orifice." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

- d. A nozzle . . . **at one end** of the housing and a mouthpiece at the other end of the housing

P&M construes "one end of the housing" as the portion of the housing where the nozzle is located or attached and "the other

end of the housing" as that portion of the housing where the mouthpiece is located or attached. (Pls. Opening Mem. at 16.) Rose Art construes "at one end" to describe the extremity of the tubular housing and construes "at the other end" as the opposite extremity. (Def. Pre-Markman Hr'g Br. at 22.) Although the plain language of the claim could be understood to refer to opposite extremities, such a construction of the claim would exclude the fig. 8 embodiment of the patent, in which the mouthpiece is connected to the housing in the area of the end of the housing opposite the nozzle, but not at the extremity of the housing. The specification of the fig. 8 embodiment states "the apparatus illustrated includes a barrel 20 formed at one end with an opening through which a reservoir pen 21 protrudes and at its other end with a converging nozzle. . . . Connected to one side of the barrel 20 is a tube 26 formed at its free end with a mouthpiece 27." ('886 patent, col. 3, ll. 12-22.) Since the intrinsic evidence is ambiguous with respect to the proper construction of this term, the Court has considered the extrinsic evidence supplied by the parties. Interactive Gift Exp., 256 F.3d at 1332. The parties have submitted dictionary definitions, inventor testimony and expert testimony as extrinsic evidence to be considered with regard to this term.

Rose Art relies on the Webster's Encyclopedic Unabridged Dictionary definition of end as "the extremity of anything that is

longer than it is wide or broad." (Def. Ex. I at 470.) P&M cites the Webster's Third New Int'l Dictionary definition of "end" as "the portion of an area or territory that lies at or by the termination." (Pls. Ex. 6 at 747.) Bolton testified at his deposition that he used the term "the end" to refer to more than just the extremity of the housing: "a larger area than just the butt end, I mean the end is what you grab hold of." (Bolton Dep. at 171-72.)

P&M's expert, Charles A. Garris, Jr.,³ testified that the claim merely describes the proper positioning of the mouthpiece and nozzle so that the air flows properly through the pen, and does not require that the mouthpiece and nozzle be located on opposite extremities:

the patent specification teaches that what is important is that the air enter the housing at a location spaced from where the air exits so that the air passes through the housing, over the pen, to the outlet. . . . Nothing in the claims or specification of the '886 patent requires the mouthpiece or nozzle to be located at the exact extremity of the housing. In fact, such an interpretation would be contrary to what is shown and described with respect to the Figure 8 embodiment of the invention in which air enters through the side of the housing at an end remote from the nozzle.

³Dr. Garris is a professor of mechanical and aerospace engineering. (Statement of Charles A. Garris, Jr. at 1.)

(Statement of Charles A. Garris, Jr. at 2.) Rose Art's experts, Victor Reiling and Parviz Daftari,⁴ testified that "end of the tubular housing" refers to one extreme end of the device and "at one end" describes "one extremity of the tubular housing and not the sides." (Statement of Victor Reiling at ¶¶ 7-8, Statement of Parviz Daftari at ¶¶ 4-5.) However, neither Mr. Reiling nor Mr. Daftari have explained the basis of their opinions and both admitted on cross-examination that neither the word "extreme" nor the word "extremity" appear in the specification of the '886 patent. (1/31/02 N.T. at 113, l. 13 - 114, l. 20 and 122, ll. 2-18.) Consequently, the Court cannot conclude that the word end is used in claim 1 to describe an integrated extremity. Based upon the intrinsic evidence contained within the patent, and the extrinsic evidence supplied by the parties, the Court construes "at one end" as "the portion of the housing where the nozzle is located or attached" and "at the other end of the housing" as "that portion of the housing where the mouthpiece is located or attached."

e. through the tubular housing and over the pen to the outlet orifice

P&M construes "through the tubular housing and over the pen to the outlet orifice" as "along the housing and pen to the outlet orifice," meaning that "the air passes from the mouthpiece, over the pen's nib, via the housing." (Pls. Opening Mem. at 18.)

⁴Mr. Reiling and Mr. Daftari are both inventors of toys.

Rose Art construes this term as "the passage of air from one end of the tubular housing or elongated hollow tubular casing, on or on top of the entire pen (not just the absorbent nib), and out the other end of the tubular housing or elongated hollow tubular casing" and contends that the term requires that "the air travels within the confines of the tubular housing and passes over the entire pen (not just the absorbent nib)." (Def. Pre-Markman Hr'g Brief at 25.)

Rose Art's suggested construction of the disputed term would exclude the fig. 8 preferred embodiment. In the fig. 8 embodiment: "air is blown through the mouth piece 27 and tube 26 into the barrel 20 from which it passes over the nib 24 to remove ink particles therefrom which leave as fine spray within the air flow through the nozzle orifice 25." ('886 patent, col. 3, ll. 22-26.) Since the reservoir pen is not entirely encased within the housing in the fig. 8 embodiment, the air does not pass over the entire pen. Rose Art's suggested construction of the disputed term would limit the patent to the figs. 1 and 4 preferred embodiment. Consequently, the Court cannot adopt the construction urged by Rose Art because that construction would limit the meaning of claim 1 to one preferred embodiment. Rodime PLC, 174 F.3d at 1303. Accordingly, the term "through the tubular housing and over the pen to the outlet orifice" is construed as "along the housing and pen to the outlet orifice." Since the entirety of the intrinsic

evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

f. means for locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice

This claim is written in means plus function language to which 35 U.S.C.A. § 112 applies. Micro Chemical, Inc. v. Great Plains Chem. Co., 194 F.3d 1250, 1257 (Fed. Cir. 1999) ("If the word 'means' appears in a claim element in association with a function, this Court presumes that § 112, ¶ 6 applies."). 35 U.S.C. § 112, ¶ 6 states as follows:

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

35 U.S.C. § 112. Construction of a claim written in means plus function language requires first identifying the function claimed and then identifying "the structure in the written description necessary to perform that function." Micro Chemical, 194 F.3d 1257-58. In identifying the function and structure claimed, the Court may not limit the function and structure to those in the working embodiment or any preferred embodiment disclosed in the specifications. Rodime, 174 F.3d at 1303.

Both P&M and Rose Art construe the function of this claim element as "locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice." P&M construes the structure of the claim element as "lugs or inwardly-extending legs, and equivalents thereof." (Pls. Opening Mem. at 19.) Rose Art contends that the structure is confined to the lugs identified in the description of the figs. 1 and 4 preferred embodiment. (Def. Pre-Markman Hr'g Br. at 26-27.)

The specification explains that the pen works best if the nib of the reservoir pen is located "so that it at least partially enters the outlet orifice of the nozzle." ('886 patent, col. 1, ll. 34-39.) The description of the preferred embodiments refers to both lugs and inwardly extending legs as the structures used to perform the claimed function. ('86 patent, col. 2, ll. 42-45, col 3, ll. 15-21.) Rose Art argues that the structure for locating the nib is limited to lugs, because the specifications do not disclose any other means. Adoption of this construction would impermissibly limit the structure to the preferred embodiments. Rodime, 174 F.3d at 1303. Rose Art also argues that the construction of the structure is limited to lugs by prosecution history estoppel because of representations made by P&M in the prosecution history of the '300 patent. The Federal Circuit explained prosecution history estoppel in Festo Corp. v. SMC Corp., 234 F.3d 558 (Fed. Cir. 2000), cert. granted, 121 S. Ct. 2519 (2001):

Actions by the patentee, including claim amendments and arguments made before the Patent Office, may give rise to prosecution history estoppel. Pharmacia & Upjohn Co. v. Mylan Pharms., Inc., 170 F.3d 1373, 1376-77, 50 U.S.P.Q.2d 1033, 1036 (Fed. Cir. 1999). "Prosecution history estoppel precludes a patentee from obtaining under the doctrine of equivalents coverage of subject matter that has been relinquished during the prosecution of its patent application." Id. at 1376, 170 F.3d 1373, 50 U.S.P.Q.2d at 1036. Therefore, "[t]he doctrine of equivalents is subservient to ... [prosecution history] estoppel." Autogiro Co. v. United States, 181 Ct. Cl. 55, 384 F.2d 391, 400-01, 155 U.S.P.Q. 697, 705 (1967). The logic of prosecution history estoppel is that the patentee, during prosecution, has created a record that fairly notifies the public that the patentee has surrendered the right to claim particular matter as within the reach of the patent.

Id. at 564-65.

Rose Art maintains that P&M argued to the patent examiner that the element of claim 1 of the '300 patent of "a plurality of lengthwise-extending locating surfaces between which is retained the pen" was not disclosed by the '886 patent, which means that P&M cannot now argue that the means for locating the pen in the '886 patent includes "lengthwise-extending locating surfaces" or their equivalents. (Def. Pre-Markman Hr'g Br. at 27 n 21.) However, prosecution history estoppel limits the coverage of the patent in whose prosecution history those claims were made. Rose Art has submitted no authority for using the prosecution history of a subsequent patent to limit the coverage of an earlier patent. Moreover, Rose Art has not pointed to any part of the prosecution

history of the '886 patent which would limit the construction of the structure in this claim to "lugs" rather than inwardly extending legs or some other equivalent thereof. The Court, therefore, construes the function of "means for locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice" as "locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice" and construes the structure as "lugs or inwardly-extending legs, and equivalents thereof." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

2. Claims 2 and 4

The parties have asked the Court to construe the term "releasably secured" which appears in dependent claims 2 and 4. Claim 2 claims an "apparatus as claimed in claim 1 wherein the nozzle is **releasably secured** to the tubular housing." ('886 patent, col. 4, ll. 18-19.) Claim 4 claims an "apparatus as claimed in claim 1 wherein the mouthpiece is **releasably secured** to the tubular housing." ('886 patent, col. 4, ll. 22-23.) Since the same term is used in both claims, it should be construed in the same way in both claims. Georgia-Pacific Corp. v. U.S. Gypsum Co., 195 F.3d 1322, 1331 (Fed. Cir. 1999) ("Unless the patent otherwise

provides, a claim term cannot be given different meaning in the various claims of the same patent.”).

P&M construes “releasably secured” as “connected, but detachable.” (Pls. Opening Mem. at 21.) Rose Art construes the term as having “a control mechanism that provides the ability to easily free the nozzle portion [or the mouthpiece in claim 4] from the fastened position and secure the nozzle [or mouthpiece] to the tubular housing in a fastened position.” (Def. Pre-Markman Hr’g. Br. at 28-29.) There is nothing in the claim language or the specification which would require the term to include “a control mechanism” for freeing and securing either the nozzle or the mouthpiece relative to the housing. Rose Art relies on extraneous evidence in the form of dictionary definitions, the “Plasto-Vertrieb” patent and expert testimony to support its definition of this term. The Court finds that the term “releasably secured” is not ambiguous and, therefore, it is not necessary to consider extrinsic evidence to construe the disputed claim language. Consequently, the Court construes the term “releasably secured” as “connected, but detachable.”

3. Claims 3 and 5

The parties have asked the Court to construe the term “position . . . relative to the housing can be varied” which appears in dependent claims 3 and 5. Claim 3 claims an “apparatus as claimed in claim 2 wherein the **position of the nozzle (4)**

relative to the housing can be varied." ('886 patent, col. 4, ll. 20-21.) Claim 5 claims an "apparatus as claimed in claim 4 wherein the **position of the mouthpiece (3) relative to the housing can be varied.**" ('886 patent, col. 4, ll. 24-25.) P&M maintains that the plain and ordinary meaning of this term is that the location of the mouthpiece [or nozzle] and the housing can differ with respect to one another. (Pls. Opening Mem. at 22.) Rose Art maintains that the term means that the nozzle and the mouthpiece can move up or down the longitudinal axis of the housing in order to accommodate different lengths of nibs (for the nozzle) and different lengths of pens (for the mouthpiece.) (Def.'s Pre-Markman Hr'g Br. at 28-31.)

Rose Art's construction of the disputed term is supported by the specification which states that:

the end walls 10, 17 of the barrel together define end stops for the pen 9, variations in pen length being accommodated by the position of the mouthpiece 3 on the barrel 2. As mentioned above, the position of the nozzle 4 relative to the barrel 2 can be varied simply by turning the nozzle about the cooperating threads to ensure that the nib 15 is always correctly located with respect to the orifice 6. By this means variations in the nib lengths of different felt tipped pens can be accommodated.

('886 patent, col. 3, ll. 3-8.) However, the claim language is clear on its face and, therefore, the Court can only consider the specification to determine if the construction must deviate from the clear language of the claim. Interactive Gift Exp., 256 F.3d at 1332. Adoption of the construction urged by Rose Art would

impermissibly restrict the construction of the term to one of the preferred embodiments described by the specification. Rodime, 174 F.3d at 1303. Consequently, the disputed term is construed to mean that "the locations of the mouthpiece [or nozzle] and housing can differ with respect to one another." Since the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

4. Claim 6

Both parties seek construction of the following highlighted term of Claim 6: "Apparatus as claimed in claim 1 wherein the nozzle **is formed integrally with** the housing." ('886 patent, col. 4, ll. 26-27.) Rose Art construes this term as describing "a nozzle that is molded such that 'the housing' and 'the nozzle' are one piece." (Def.'s Pre-Markman Hr'g Br. at 32.) P&M agrees that this is the correct construction of the term, as long as the construction is not limited to a nozzle and housing which are "formed in a 'mold' or 'molded together.'" (Pls. Supp. Mem. at 17.) Accordingly, the Court construes the term "is formed integrally with" in claim 6 to describe "a nozzle that is constructed such that the housing and the nozzle are one piece." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by Rose Art with respect to this term.

B. The '300 Patent

P&M claims that Rose Art infringes claims 1-4 of the '300 patent. Claims 2, 3, and 4 are all dependent claims which depend from claim 1, therefore, they incorporate the limitations of claim 1. Jeneric/Pentron, 205 F.3d at 1383.

1. Claim 1

The parties dispute the following highlighted terms in claim 1:

Apparatus for dispensing a fine spray of liquid particles, the apparatus comprising **an elongate hollow tubular casing within which is retained** a pen formed with a nib of absorbent material, the casing including **at one end a mouthpiece and at its other end** a nozzle having an orifice into which the nib of the pen at least partially protrudes, **spacings between the internal surface of the casing and the pen periphery defining one or more passageways for the flow of air blown into the casing** through the mouthpiece which passes over the nib of the pen and leaves the casing through the orifice, the apparatus being characterised [sic] in that the **internal cross-section is formed with a plurality of lengthwise-extending locating surfaces between which is retained the pen** and in that the orifice of the nozzle communicates with an **expansion chamber** into which the nib of the pen can at least partially protrude, the spacings between neighbouring [sic] locating surfaces and the pen periphery defining passageways for the flow of air through the casing, this air leaving the casing through the orifice and the expansion chamber.

('300 patent, col. 4, ll. 24-42, emphasis supplied by the parties.)

a. elongate hollow tubular casing

P&M construes this term as corresponding to the "hollow tubular housing" of the '886 patent and describing "an unfilled, approximately tube-shaped body." (Pls. Opening Mem. at 24.) Rose Art construes the term to mean "a lengthened hollow cylindrical body that encases the reservoir pen." (Def.'s Pre-Markman Hr'g Br. at 33.) The specification states that the tube can be a variety of shapes, including triangular, square, diamond, or oval. ('300 patent, col. 3, ll. 39-51.) Consequently, the claim cannot be understood to mean that the casing is cylindrical. Moreover, there is nothing in the plain language of the claim, or the specification, which would require the casing to encase the reservoir pen in its entirety. Accordingly, the term "elongate hollow tubular casing" is construed as "an unfilled approximately tube-shaped body." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by Rose Art with respect to this term.

b. within which is retained

P&M construes this term as "holding at least a portion of the pen," which corresponds to the construction of the term "retained within" in the '886 patent. (Pls. Opening Mem. at 24.) Rose Art construes this term as "a reservoir pen formed with an absorbent nib of absorbent material being held in place,

positioned, or stored inside of the 'casing' (i.e., the elongated cylindrical body that covers the pen)." (Def. Pre-Markman Hr'g Br. at 34.) As discussed above, the hollow tubular casing cannot be construed to describe a cylindrical body that covers the entire pen. Moreover, there is nothing in the plain language of claim 1 of the '300 patent which requires that the reservoir pen be held completely in place or stored within the casing. Rose Art cites to illustration 11 of the '300 patent which shows a reservoir pen which appears to be completely contained inside of the casing. However, adoption of this illustration as a restriction on the claim language would impermissibly add limitations appearing only in the specification. Electro Med. Sys., 34 F.3d at 1054 ("although the specifications may well indicate that certain embodiments are preferred, particular embodiments appearing in a specification will not be read into the claims when the claim language is broader than such embodiments."). Accordingly, "within which is retained" is construed to mean "holding at least a portion of." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by Rose Art with respect to this term.

- c. The casing including **at one end** a mouthpiece
and **at its other end** a nozzle

P&M states that the construction of the terms "at one end" and "at its other end" should correspond to the construction of "at one end" and "at the other end" in the '886 patent. (Pls.

Opening Mem. at 25.) Rose Art argues that the term "at one end" is understood by those of ordinary skill in the art as one extremity of the airbrush and the term "at its other end" is understood as the opposite extremity. (Def. Pre-Markman Hr'g Br. at 35-36, Def. Ex. I at 470.) Although the plain language of the claim could be understood to describe the extremities of the airbrush, Rose Art does not point to any differences in the two patents which would require "at one end" and "at its other end" to differ in meaning from the terms "at one end" and "at the other end" in the '886 patent. Moreover, figs. 1 - 5 of the patent show a casing which has a mouthpiece in the area of one extremity, but which comprises a space larger than just the extremity, and a nozzle near, but not comprising, the opposite extremity.⁵ The specification describes: "a mouthpiece 3 which comprises an annular passageway 4 about a tubular cap 5 disposed at one end" and "a nozzle 9 including an orifice 10 which opens into a converging expansion chamber 11." ('300 patent, col. 3, ll. 2-10.) Neither the "nozzle" nor the "mouthpiece" can validly be defined as an extremity, i.e., the outermost component. The specification, therefore, does not describe a mouthpiece or a nozzle located at opposite extremities of the casing. The Court cannot adopt the construction suggested by Rose Art because it would exclude the preferred embodiment

⁵Figs. 1 - 5 of the '300 patent have been reproduced in the Appendix to this opinion.

described in the specification. Vitronics Corp., 90 F.3d at 1583-84. Therefore, the term "at one end" is construed to describe "that portion of the casing where the nozzle is located or attached" and "at its other end" is construed to describe "the portion of the casing where the mouthpiece is located or attached." Since the entirety of the intrinsic evidence with regard to these terms is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to these terms.

- d. spacings between the internal surface of the casing and the pen periphery defining one or more passageways for the flow of air blown into the casing

P&M construes this phrase as describing "open areas bounded by the inner wall of the casing and the outside of the pen through which air can pass." (Pls. Opening Mem. at 26.) Rose Art maintains that this phrase should be construed as "open areas through which air can flow through the mouthpiece, through the casing, through the passageways, and over the nib of the pen." (Def. Reply at 9.) The specification describes the spacings as the open area between the outside of the reservoir pen and the inside of the casing: "[I]n use, air is blown by the user through the mouthpiece 3 and the annular passageways defined between the opposed surfaces of the pen body 2 and the internal surfaces of the casing 1." ('300 patent, col. 3, ll. 26-29.) Adoption of the construction suggested by Rose Art would impermissibly add additional functional limitations to the claim concerning the

passage of air through the casing which are not required by the plain language of the claim. Electro Med. Sys., 34 F.3d at 1054. Accordingly, this phrase will be construed to describe "open areas bounded by the inner wall of the casing and the outside of the penetration through which air can pass."

e. lengthwise-extending locating surfaces

P&M construes the term "lengthwise-extending locating surfaces" as "longitudinal projections protruding inwardly from the interior of the casing." (Pls. Opening Mem. at 26.) P&M explains that these lengthwise-extending locating surfaces are the structure which corresponds to the locating means in the '886 patent. Rose Art construes the term as "three fins projecting from the inner wall of the casing used to position the marker" because that configuration is mentioned in the specification. (Def. Pre-Markman Hr'g Br. at 39, citing '300 patent, col. 3, ll. 10-12.) However, the specification provides several examples of the lengthwise-extending locating surfaces which can be used as the locating means claimed by the '300 patent: fins extending inwardly from the inner surface of the casing, an interior casing with three flat sides, an oval interior casing, or an inner tube. ('300 patent, col. 2, ll. 42-53 and col. 3, ll. 10-12.) The Court cannot adopt a construction of this term which would restrict the claim to one of the preferred embodiments. Rodime PLC, 174 F.3d at 1303. Accordingly, "lengthwise-extending locating surfaces" is construed

as "longitudinal projections protruding inwardly from the interior of the casing."

f. expansion chamber

Rose Art construes "expansion chamber" to mean "a concave structure at the outlet orifice of the nozzle that is designed to accelerate the exiting stream from the airbrush." (Def. Pre-Markman Hr'g Br. at 41.) P&M agrees with this construction except in so far as it imports an unnecessary functional limitation, "accelerating the exiting stream from the airbrush," from the specification.⁶ (Pls. Supp. Br. at 22-23.) The Court cannot add functional limitations appearing only in the specification to the construction of the disputed claim term. Electro Med. Sys., 34 F.3d at 1054. Accordingly, the term "expansion chamber" is construed to mean "a concave structure at the outlet orifice of the nozzle." Since the entirety of the intrinsic evidence with regard to this term is not ambiguous, the Court did not consider the extrinsic evidence submitted by the parties with respect to this term.

2. Claim 2

Both parties seek construction of the following highlighted term of Claim 2: "Apparatus of claim 1 further

⁶The specification describes the function of the expansion chamber as follows: "[a]s the air enters and passes through the expansion chamber it accelerates thereby inducing a swirling motion which ensures effective removal of liquid particles from the nib 14 of the pen 2." ('300 patent, col. 3, ll. 32-38.)

comprising **stop means** within the casing against which a surface of a pen can abut to position the nib of the pen at least partially within the nozzle orifice." ('300 patent, col. 4, ll. 43-46.) This is not a means plus function claim, even though the word "means" is used in the term because the claim element does not recite a function. Enviro Corp. v. Clestra Cleanroom, Inc., 209 F.3d 1360, 1364 (Fed. Cir. 2000) ("If a claim element contains the word 'means' and recites a function, this court presumes that element is a means-plus-function element under § 112, ¶ 6.") (citation omitted). P&M construes "stop means" as "a surface or surfaces within the casing against which the pen abuts." (Pls. Opening Mem. at 29.) Rose Art argues that this claim term should be limited to a structure comprising three fins because that is the structure described in the specification and because prosecution history estoppel prevents the patent from claiming another stop means. (Def. Pre-Markman Hr'g Br. at 42-43.)

The specification states that "the pen is supported centrally within the casing 1 by the fins 12 with a shoulder 15 of the pen body abutting against projecting stops 16 of the fins 12." ('300 patent, col. 3, ll. 21-23.) In the prosecution history of the '300 patent, in order to distinguish claim 1 of the '300 patent from the '886 patent, Bolton informed the patent examiner that:

The invention as defined by claim 1 requires the internal cross-section of the apparatus to be formed "with a plurality of lengthwise-extending locating surfaces between

which is retained the pen". In a preferred embodiment, these lengthwise-extending locating surfaces are provided by the fins 12 shown in Fig. 1. As indicated in the Specification at page 6, line 7-8, the fins 12 centralize the pen within the casing for air flow around the pen. The "lengthwise-extending locating surfaces" limitation is not disclosed or suggested by the '886 patent, wherein the pen 9 is retained between end wall 10 (shown in Fig. 6 of the '886 patent) and end wall 17 (shown in Fig. 7 of the '886 patent)."

(Def. Exh. L at 5.) Although Rose Art has correctly noted that the specification describes the stop means in a preferred embodiment as comprising projecting stops on the fins, the Court cannot adopt the construction recommended by Rose Art because that would impermissibly limit the claim to one preferred embodiment described in the specification. Electro Med. Sys., 34 F.3d at 1054. Moreover, prosecution history estoppel does not limit the composition of the stop means to three fins. Bolton mentioned the three fins only as a preferred embodiment of the "lengthwise-extending locating surfaces," not as the only possible form of the stop means. Consequently, the term "stop means" is construed as "a surface or surfaces within the casing against which the pen abuts."

3. Claim 3

The parties seek construction of the following highlighted term of Claim 3: "Apparatus as claimed in claim 1 wherein the locating surfaces comprises a **plurality of fins extending inwardly from the casing interior.**" ('300 patent, col.

4, ll. 47-49.) P&M construes "fins extending inwardly from the casing interior" as "long, narrow longitudinally-extending locating surfaces." (Pls. Opening Mem. at 30.) Rose Art construes "plurality of fins" as "three wing-like ridges" because the specification refers to "three fins." (Def. Pre-Markman Hr'g Br. at 43.) Although the specification refers to three fins in describing a preferred embodiment, the Court cannot limit the claim to one preferred embodiment. Electro Med. Sys., 34 F.3d at 1054. Moreover, the word plurality, used to describe the number of fins comprising the locating surface, means two or more, not necessarily three. Dayco Prods. Inc. v. Total Containment, Inc., 258 F.3d 1317, 1327-28 (Fed. Cir. 2001) ("In accordance with standard dictionary definitions, we have held that "plurality," when used in a claim, refers to two or more items, absent some indication to the contrary.") (citation omitted). Accordingly, the term "plurality of fins extending inwardly from the casing interior" is construed as "two or more long, narrow longitudinally-extending locating surfaces."

4. Claim 4

The parties seek construction of the following highlighted term of Claim 4: "Apparatus as claimed in claim 3 where the stop means comprises **steps formed in the fins.**" ('300 patent, col. 4, ll. 50-51.) P&M construes the term as "a surface or surfaces cut into the fins against which part of the pen may

abut" and explains that the steps abut the surface of the pen, thereby preventing it from sliding into the casing and keeping it in position. (Pls. Opening Mem. at 30.) Rose Art construes the word "steps" as protrusions that are as high as they are long. (Def. Pre-Markman Hr'g Br. at 43.) Rose Art has supplied no basis for requiring the steps to be as high as they are long. Consequently, the term is construed as "a surface or surfaces cut into the fins against which part of the pen may abut."

An appropriate order follows.

IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF PENNSYLVANIA

P & M PRODUCTS, LTD., et al. : CIVIL ACTION
:
v. :
:
ROSE ART INDUSTRIES : NO. 01-231

O R D E R

AND NOW, this day of March, 2002, in consideration of the parties' Memoranda on Claim Construction and the exhibits, testimony, and argument presented during the January 31, 2002 Markman hearing, **IT IS HEREBY ORDERED** that the disputed claim terms of the '886 and '300 patents are construed as follows:

'886 Patent:

1. **"hollow tubular housing"** is construed as: "an unfilled, approximately tube-shaped body."
2. **"retained within"** is construed as: "holding at least a portion of."
3. **"mouthpiece"** is construed for both the '886 and '300 patents as: "a part to which the mouth is applied to introduce air into the housing."
4. a nozzle . . . **"at one end of the housing"** is construed as: "that portion of the housing where the nozzle is located or attached."
5. a mouthpiece **"at the other end of the housing"** is construed as: "that portion of the housing where the mouthpiece is located or attached."

6. **"through the tubular housing and over the pen to the outlet orifice"** is construed as: "along the housing and pen to the outlet orifice."
7. **"means for locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice"** is construed as follows: the function is "locating the pen . . . with its absorbent nib at least partially within the boundary of the outlet orifice" and the structure is "lugs or inwardly-extending legs, and equivalents thereof."
8. **"releasably secured"** in claims 2 and 4 is construed as: "connected but detachable."
9. **"position of the mouthpiece [or nozzle] relative to the housing can be varied"** in claims 3 and 5 is construed as: "the location of the mouthpiece [or nozzle] and the housing can differ with respect to one another."
10. **"the nozzle is formed integrally with the housing"** is construed as "a nozzle that is constructed with the housing such that it is one piece."

'300 Patent:

11. **"elongate hollow tubular casing"** is construed as: "an unfilled, approximately tube-shaped body."

12. **"within which is retained"** a pen is construed as:
"holding at least a portion of the pen"
13. "the casing including **at one end** a mouthpiece" is
construed as: "that portion of the casing where the
mouthpiece is located or attached."
14. and **"at its other end** a nozzle" is construed as: "that
portion of the casing where the nozzle is located or
attached."
15. **"spacings"** is construed as: "open areas bounded by the
inner wall of the casing and the outside of the pen
through which air can pass."
16. **"lengthwise-extending locating surfaces"** is construed as:
"longitudinal projections protruding inwardly from the
interior of the casing."
17. **"expansion chamber"** is construed as: "the area bounded
by the inwardly-converging exterior surface of the
nozzle."
18. **"stop means"** is construed as: "a surface or surfaces
within the casing against which the pen abuts."
19. **"plurality of fins extending inwardly from the casing
interior"** is construed as: "two or more long, narrow
longitudinally-extending surfaces."

20. "**steps formed in the fins**" is construed as: "a surface or surfaces cut into the fins against which part of the pen may abut."

BY THE COURT:

John R. Padova, J.