

United States District Court,  
N.D. Ohio, Eastern Division.

**The WOOSTER BRUSH COMPANY,**  
Plaintiff.

v.

**NEWELL OPERATING COMPANY,, d/b/a and through its division, EZ Paint Company,**  
Defendant.

**April 6, 1999.**

In patent infringement suit, paint roller manufacturer moved for summary judgment on competitor's infringement claim regarding patent for manufacturing process. The District Court, Gwin, J., held that paint roller manufacturing process did not infringe patent under the doctrine of equivalents.

Motion granted.

5,195,242. Construed and Ruled Not infringed.

Harry D. Cornett, Jr., Jeffrey Alden Healy, Thomas E. O'Connor, Jr., Arter & Hadden, Columbus, OH, Mark J. Skakun, III, Ralph D. Amiet, Buckingham, Doolittle & Burroughs, Akron, OH, for Wooster Brush Company, plaintiff.

Michael L. Brody, Winston & Strawn, Chicago, IL, Laura J. Gentilcore, Ray L. Weber, Edward G. Greive, Renner, Kenner, Greive, Bobak, Taylor & Weber, Akron, OH, Christopher B. Schneider, Micah R. Onixt, Schiff, Hardin & Waite, Chicago, IL, for Newell Operating Company defendant.

## **OPINION AND ORDER**

**GWIN, District Judge.**

On March 1, 1999, Plaintiff Wooster Brush Co. moved this Court for summary judgment [Doc. 27]. In seeking summary judgment in this patent infringement action, Plaintiff Wooster Brush argues that no material facts support Defendant-Counterplaintiff Newell Operating Company's claim that Wooster Brush infringes United States Patent Number 5,195,242 (the '242 patent).

Because the Court finds no material facts supporting Defendant Newell's counterclaim alleging infringement, the Court grants Plaintiff Wooster Brush's motion for summary judgment.

### **I. Background of the '242 Patent and the '790 Patent**

Plaintiff Wooster Brush and Defendant Newell (doing business through its division, EZ Paint Company)

compete in the business of manufacturing paint rollers. In this action, Wooster Brush seeks judgment finding that its process for manufacturing paint roller covers does not infringe the '242 patent. The '242 patent is owned by Defendant Newell after assignment from the patent's inventor, Chandra Sekar. In response, Plaintiff Wooster Brush argues that it manufactures paint rollers using a process taught in United States Patent Number 5,572,790 (the '790 patent), also under a license from inventor Chandra Sekar. Defendant Newell counterclaims, alleging infringement.

In the mid-nineteenth century, paint rollers began to be used. Originally, paint rollers were permanently attached to a handle. At that time, rollers were heavy, bulky and difficult to clean.

After World War II, removable and disposable rollers were developed. Because these products avoided difficulties with the cleaning of permanent rollers, they were easier to use. Initially, these roller covers were primarily strips of paper spiraled onto a mandril and bound together on cores. While an improvement over permanent rollers, these disposable covers deteriorated quickly. Much of this deterioration was caused by solvents used in paint cleaners.

To avoid the problem of deterioration associated with the use of solvents, roller manufacturers began using polypropylene, a plastic. While the use of a polypropylene core ameliorated the solvent deterioration, it was difficult to bond cover materials to.

In late 1988, Chandra Sekar developed a process for making a paint roller. He applied for a patent on the process. The '242 patent, entitled "Method of Making a Paint Roller," was issued for this process on March 23, 1993. The '242 patent described a process for making paint rollers by bonding strips in an overlapping fashion through the use of a thermoplastic material, allowing the core to bond as it cools and then adding an adhesive to the outer surface of the core and thereafter a cover which bonds as the adhesive cools.

In May 1995, and after having obtained the '242 patent, Sekar went on to develop a different process for the making of paint rollers. In this new process, Sekar did not use two applications of polypropylene as taught in the '242 patent. Instead, he spiraled only a single strip of polypropylene around the mandril and did so in an abutting rather than overlapping relationship. Unlike the '242 patent, this new process applied liquefied polypropylene to the exterior of the wound strip, rather than with the laying of the initial strip. Moreover, Sekar's new process formed the roller core and applied the fabric in one process and with one application of liquid polypropylene.

Soon after developing this new technique, Sekar sought a new patent. The patent was eventually granted as the '790 patent. In the application, Sekar's lawyers disclosed two of Sekar's earlier patents, U.S. Patent No. 5,398,409 (the "409 Patent") and the '242 patent as prior art. After the United States Patent and Trademark Office objected because Sekar's application might involve double-patenting, Sekar filed a terminal disclaimer. In that terminal disclaimer, defendant limited the term of the '790 patent to the term of the '409 Patent. Importantly, Sekar never limited the '790 patent to the term of the '242 patent. After receiving Sekar's limitation of the '790 patent to the term of the '409 patent, the Patent and Trademark Office issued the '790 patent.

The Patent and Trademark Office issued Sekar the '790 patent after notice of the '242 patent. The Patent and Trademark Office did this without a terminal disclaimer limiting the term of the '790 patent.

The '790 patent thus does not describe several steps used in the '242 patent. The '790 patent does not have

separate step of forming the core with first-applied hot thermoplastic. The '790 patent does not have a separate step for applying adhesive to the newly-formed core to allow attachment of the cover. Instead, the '790 patent describes "a single application of adhesive"-simultaneously bonding the sole strip to itself and to the fabric. In addition, the '790 patent uses a single abutting strip, not one or more overlapping strips.

The '790 patent has been commercially successful. The '790 patent process produces paint rollers significantly faster than older processes, including the '242 patent process. While the '242 patent process has never been used commercially, the '790 patent process is used by at least three manufacturers.

## II. Standard of Review

Fed.R.Civ.P. 56(c) states the procedure for granting summary judgment and says in pertinent part:

[t]he judgment sought shall be rendered forthwith if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law.

In considering a motion for summary judgment, the court must view the facts and all inferences to be drawn therefrom in the light most favorable to the non-moving party. *Adickes v. S.H. Kress & Co.*, 398 U.S. 144, 158-59, 90 S.Ct. 1598, 26 L.Ed.2d 142 (1970); *60 Ivy Street Corp. v. Alexander*, 822 F.2d 1432, 1435 (6th Cir.1987); *SEC v. Blavin*, 760 F.2d 706, 710 (6th Cir.1985). The moving party has the burden of showing conclusively that no genuine issue of material fact exists. *60 Ivy Street Corp.*, 822 F.2d at 1435.

Essentially factual disputes about matters essential to adjudication preclude the Court from granting summary judgment. *See id.* But not every factual dispute between the parties will prevent summary judgment. Rather, the disputed facts must be material. They must be facts which, under the substantive law governing the issue, might affect the outcome of the suit. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 106 S.Ct. 2505, 91 L.Ed.2d 202 (1986).

The factual dispute must also be genuine. The facts must be such that if they were proven at trial a reasonable jury could return a verdict for the non-moving party. *Id.* at 248, 106 S.Ct. 2505. The disputed issue does not have to be resolved conclusively in favor of the non-moving party, but that party is required to present some significant probative evidence which makes it necessary to resolve the parties' differing versions of the dispute at trial. *60 Ivy Street*, 822 F.2d at 1435 (citing *First Nat'l Bank of Arizona v. Cities Serv. Co.*, 391 U.S. 253, 88 S.Ct. 1575, 20 L.Ed.2d 569 (1968)); *see also Celotex Corp. v. Catrett*, 477 U.S. 317, 322, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986); *Matsushita Elec. Indus. Co., Ltd. v. Zenith Radio Corp.*, 475 U.S. 574, 106 S.Ct. 1348, 89 L.Ed.2d 538 (1986).

Thus, the judge's function at the point of summary judgment is limited to determining whether sufficient evidence has been presented to make the issue a proper jury question, and not to judge the evidence and make findings of fact. "[A]t the summary judgment stage the judge's function is not himself to weigh the evidence and determine the truth of the matter but to determine whether there is a genuine issue for trial." *60 Ivy Street*, 822 F.2d at 1436 (quoting *Anderson*, 477 U.S. at 249, 106 S.Ct. 2505).

The Court reviews Plaintiff Wooster Brush's motion and relevant portions of the record in light of this standard and concludes that Defendant Newell's infringement claim must fail.

### III. Description of Arguments

In seeking a declaration that it does not infringe the '242 patent, Plaintiff Wooster Brush says its process differs in several important respects from the process taught with the '242 patent. First, WoosterBrush says its process has no "overlapping" of a thermoplastic strip with applying hot thermoplastic to form the core. Instead, the Wooster Brush process uses abutting or closely spaced strips, but never overlapping.

Second, Wooster Brush does not use a separate step to apply adhesive to glue the cover to the newly-formed core. Third, unlike the '242 patent, Wooster Brush does apply hot thermoplastic before the strip(s) are wound onto a mandril.

In support of its argument that its process does not infringe the '242 patent, Plaintiff Wooster Brush argues that the Patent and Trademark Office's issuance of the '790 patent suggests a presumption that the '790 patent describes a new process.

Defendant Newell does not argue that Plaintiff Wooster Brush literally infringes claim 8 of the '242 patent. Instead, Newell claims that Wooster Brush infringes the '242 patent under the doctrine of equivalents.

### IV. Claim Construction

[1] The construction of a patent, including terms of art within its claim, is a question of law. *See* Markman, 517 U.S. at 370, 383-91, 116 S.Ct. 1384 (1996).

[2] In resolving a claim of patent infringement, a court must "first determine the meaning and scope of the patent claims at issue, a question of law, before the factfinder may resolve whether the accused device infringes the patent claims as construed by the court, a question of fact." *Storer v. Hayes Microcomputer Prod., Inc.*, 960 F.Supp. 498, 500 (D.Mass.1997).

[3] In construing a patent claim, the Court looks first to the three sources of intrinsic evidence of record: the patent itself, including the claims, the specification, and, if in evidence, the prosecution history. *Insituform Technologies, Inc. v. Cat Contracting, Inc.*, 99 F.3d 1098, 1105 (Fed.Cir.1996). The claim language defines the scope of the claim and "a construing court does not accord the specification, prosecution history, and other relevant evidence the same weight as the claims themselves, but consults these sources to give the necessary context to the claim language." *Eastman Kodak Co. v. Goodyear Tire & Rubber Co.*, 114 F.3d 1547, 1552 (Fed.Cir.1997).

[4] The Court first examines the language of the claim. A construing court does not accord the specification, prosecution history, and other relevant evidence the same weight as the claim itself, but consults these sources to give the necessary context to the claim language. *Id.* Reliance upon extrinsic evidence is improper where the public record, i.e. the claims, specifications, and file history unambiguously defines the scope of the claims. *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1583 (Fed.Cir.1996).

[5] Terms used in the claim are to be given their ordinary and customary meaning "unless another meaning is specified or evident from the patent history." *Storer*, 960 F.Supp. at 501 (citations omitted).

[6] In interpreting the claims and specification, the construing court interprets words "as one of skill in the art at the time of the invention would understand them." *Eastman Kodak*, 114 F.3d at 1555. In addition, "the court should also consider the patent's prosecution history ... in order to ascertain the true meaning of the

language used in the patent claim." *Markman*, 52 F.3d at 980; *see also* *Standard Oil Co. v. American Cyanamid Co.*, 774 F.2d 448, 452 (Fed.Cir.1985) ("[T]he prosecution history (or file wrapper) limits the interpretation of claims so as to exclude any interpretation that may have been disclaimed or disavowed during prosecution in order to obtain claim allowance.").

[7] The Court looks to extrinsic evidence to assist in construing a patent claim only if the intrinsic evidence is ambiguous. FN1

FN1. *See* *Vitronics*, 90 F.3d at 1583-85; *Markman*, 52 F.3d at 980-81. Thus, "[i]f a court is able to discern the meaning of a patent's claims after considering these three sources of intrinsic evidence [i.e. the patent claims, specification and prosecution history], it should not look further to expert testimony or other evidence not part of the public record." *Revlon Consumer Prod. Corp. v. L'Oreal*, 170 F.R.D. 391, 393 (D.Del.1997). Opinion evidence on claim construction, "is no better than opinion testimony on the meaning of statutory terms." *Vitronics*, 90 F.3d at 1585.

### **V. Claim Construction of Claim 8 of the '242 Patent**

Defendant Newell alleges that Plaintiff Wooster Brush infringes claim 8 of the '242 patent. FN2 To determine whether Wooster Brush infringes claim 8 of the '242 patent, the Court first construes that claim.

FN2. Defendant Newell does not allege infringement of claims 1-7 of the '242 patent. While Defendant Newell asserts infringement of claims 9-11 of the '242 patent, those claims are dependent on claim 8. If claim 8 is not infringed, neither are claims 9-11. For purposes of this motion, the only claim that needs to be discussed is claim 8.

The "Summary of the Invention" in the 242 patent explains the process underlying Defendant Newell's claim of infringement:

The strips comprising the core are bonded together by a thermoplastic material, again preferably polypropylene, which is applied to the strips in liquid form, as by sufficiently heating the polypropylene in a demand melter to liquefy it, and then feeding it to the strips via feed tubes extending from the melter. The strips are rapidly bonded to each other to form the core as the liquid polypropylene cools and sets. After the core is formed, an adhesive, preferably additional liquid polypropylene, is applied to the outer surface of the core whereupon a fabric cover, comprised for example of polyester, is wound about the core and bonded thereto as the liquid polypropylene cools and sets. (Emphasis added.)

In independent claim eight, the '242 patent teaches:

8. A method for making a paint roller comprising: winding one or more strips of thermoplastic material *in overlapping relation*, thereby forming a tubular core; *applying a liquid thermoplastic material to said one or more strips*, thereby bonding said one or more strips together; *applying an adhesive to an outer surface* of said core; wrapping a cover about said core over said adhesive, thereby bonding said cover to said core and forming said roller.

'242 patent (emphasis added).

In construing claim 8 of the '242 patent, the Court finds it unnecessary to consider extrinsic evidence. Rather, the Court finds it appropriate to construe the claim without reference such outside materials.

To make this construction, the Court first considers the language of claim 8. To assist this interpretation, the Court also considers Sekar's "Summary of the Invention." *See California Medical Products, Inc. v. Tecnol Medical Products, Inc.*, 921 F.Supp. 1219, 1227 (D.Del.1995) ("The preamble is 'an introductory phrase that may summarize the invention, its relation to the prior art, or its intended use or properties.' It may also constitute a limitation on a claim.") (quoting 2 DONALD S. CHISUM, PATENTS s. 806[1][b] (1994)).

[8] The preamble of a claim does not limit the scope of the claim when it merely states a purpose or intended use of the invention. However, terms appearing in a preamble may be deemed limitations of a claim when they "give meaning to the claim and properly define the invention." *In re Paulsen*, 30 F.3d 1475, 1479 (Fed.Cir.1994).

Guided by the language chosen by Sekar in claim 8 and the preamble of the '242 patent, the Court construes the '242 patent to have the following elements: A method for making a paint roller comprising:

- 1) winding one or more strips of thermoplastic material in overlapping relation, thereby forming a tubular core;
- 2) applying a liquid thermoplastic material to said one or more strips, thereby bonding said one or more strips together causing the strips to rapidly bond to each other to form the core as the liquid thermoplastic cools and sets; and
- 3) after the core cools and sets, thereafter applying a liquid adhesive to an outer surface of said core; wrapping a cover about said core over said adhesive, thereby bonding said cover to said core as the liquid adhesive cools and sets to form the roller.

As interpreted by the Court, claim 8 of the '242 patent involves a method for making paint rollers involving: (1) the "overlapping" of the thermoplastic "strips" used to form the inner core of the paint roller, and (2) two separate steps of "applying" hot thermoplastic or adhesive: one to form the core, one to adhere the fabric to the newly-formed core.

In its manufacture of paint rollers, Wooster Brush uses a process largely based upon the later patent, the '790 patent. This '790 patent was also issued to Sekar in May 1995. Wooster is licensed under the '790 patent. Wooster Brush claims to use proprietary techniques and equipment in addition to the process disclosed in the '790 patent.

In its process, Plaintiff Wooster Brush uses neither of the two requirements of the process claims of the '242 patent: (1) there is no "overlapping" of a thermoplastic strip with applying hot thermoplastic to form the core, and (2) adhesive is not applied, in a subsequent and separate step, to the newly-formed core to glue the cover to the newly-formed core.

Defendant Newell does not argue that Plaintiff Wooster Brush literally infringes claim 8 of the '242 patent. Instead, Newell claims that Wooster Brush infringes the '242 patent under the doctrine of equivalents.

## VI. Doctrine of Equivalents

[9] Under the equitable doctrine of equivalents, a product or process that does not literally infringe a patent, because it has elements that differ from those specified in the patent claim limitations, may nonetheless be held to infringe if the differences are insubstantial. As recognized in *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 607, 70 S.Ct. 854, 94 L.Ed. 1097 (1950), outright duplication of a patented invention is rare. If an imitator can circumvent an existing patent by making mere technical, insubstantial changes to the patented invention and so avoid the literal scope of the patent claims, patent protection would be made meaningless. The doctrine of equivalents affords patentees a remedy against the infringer who has avoided literal infringement only by making insubstantial changes to elements of the claimed invention.

[10] [11] Under the doctrine of equivalents, a product or process that does not literally infringe upon the express terms of a patent claim may nonetheless be found to infringe if there is "equivalence" between the elements of the accused product or process and the claimed elements of the patented invention. *Warner-Jenkinson Co. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 21, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997) (citing *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 609, 70 S.Ct. 854, 94 L.Ed. 1097 (1950)). Equivalency must be determined against the context of the patent, the prior art, and the particular circumstances of the case:

"Equivalence, in the patent law, is not the prisoner of a formula and is not an absolute to be considered in a vacuum.... Consideration must be given to the purpose for which an ingredient is used in a patent, the qualities it has when combined with the other ingredients, and the function which it is intended to perform. An important factor is whether persons reasonably skilled in the art would have known of the interchangeability of an ingredient not contained in the patent with one that was."

*Id.*

[12] [13] In deciding equivalence, each element contained in a patent claim is deemed material to defining the scope of the patented invention. The doctrine of equivalents must be applied to individual elements of the claim, not to the invention as a whole. *Warner-Jenkinson*, 520 U.S. at 29, 117 S.Ct. 1040. Consequently, a claim is infringed only if each limitation in the claim is found in the accused device, either literally or by a substantial equivalent. *Vehicular Technologies Corp. v. Titan Wheel Int'l, Inc.*, 141 F.3d 1084, 1089 (Fed.Cir.1998).

[14] Determination of infringement under the doctrine of equivalents requires the fact-finder to determine whether the structural differences between the particular elements of the accused device and the asserted claim's limitations are insubstantial. *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206, 1212 (Fed.Cir.1998) (citing *Warner-Jenkinson*, 520 U.S. at 23, 117 S.Ct. 1040).

[15] One way to determine if substantial differences exist is to apply the "function-way-result" analysis of *Graver Tank*, as sanctioned by *Warner-Jenkinson*. *Id.* Under the function-way-result test, one considers whether the element of the accused device at issue performs substantially the same function, in substantially the same way, to achieve substantially the same result, as the limitation at issue in the patent process.

[16] [17] Plaintiff Wooster's process for producing paint rollers is accomplished in one step. Defendant Newell argues that Wooster's one-step process effectively collapses the '242 patent's two-step process and is therefore not significantly different from the '242 process. Newell points out that "elements or steps may be

combined without *ipso facto* loss of equivalency." *Ethicon Endo-Surgery, Inc. v. United States Surgical Corp.*, 149 F.3d 1309, 1320 (Fed.Cir.1998). However, a combination may be an equivalent only "as long as no claim limitation is thereby wholly vitiated." *Id.* As explained below, Newell's suggested interpretation would wholly vitiate claim limitations in the '242 patent.

First, the '242 patent specifically requires that the polypropylene strip(s) overlap. Wooster's process incorporates a "stylus," unique to Wooster's practice of the '790 patent, which keeps its strip from overlapping. To read this process as equivalent to the '242 patent's process would vitiate specific claim limitations in the '242 patent.

Second, and most important, the '242 process as construed by this Court contains separate elements which produce the final product: liquid thermoplastic material is applied to one or more strips to form the core as the thermoplastic material cools and, upon cooling, another layer of adhesive is applied to bond the cover to the core. Under the terms of the patent claims, this process must occur in sequence.

In the New Wooster process, the formation of the core and the adhesion of the cover to the core occur simultaneously, facilitated by one application of liquid thermoplastic material. Wooster's one-step process is not a combination of the '242 patent's elements; it does not represent a more efficient way of applying two strips of liquid thermoplastic material. Rather, it represents a new method by which one of the two steps of the '242 patent-the second application of adhesive material and relevant cooling period-is eliminated. To interpret Wooster's process as equivalent to the '242 patent's elements would thus fly in the face of the Supreme Court's admonition that equivalence does not exist when a finding of equivalence would eliminate an element in the patented process.

[18] Adding further support to this analysis is the fact that "paper patents"-those that have not been put into commercial production-"receive only a narrow range of equivalents." *CS&M, Inc. v. Covington Bros. Technologies*, 678 F.2d 118, 120 (9th Cir.1982); *see also* *Modern Products Supply Co. v. Drachenberg*, 152 F.2d 203, 206 (6th Cir.1945) (stating claims of paper patents should be strictly construed); *Shaw v. Non-Linear Systems, Inc.*, 308 F.Supp. 343, 351 (S.D.Ohio 1969) (stating paper patents are "not entitled to any appreciable range of equivalents" and must be strictly construed); *Blanchard v. J.L. Pinkerton*, 77 F.Supp. 861, 863 (S.D.Cal.1948) (stating "a greater range of equivalents is allowed ... with a patent which has been reduced to practice successfully than ... [with] paper patents"), *aff'd*, 173 F.2d 573 (9th Cir.1949).

The '242 patent has not been practiced commercially. Therefore, Defendant Newell is not entitled to a broad reading of equivalence between the '242 and Plaintiff Wooster's process.

The grant of the '790 patent supports this Court's finding that the Wooster Brush process is not equivalent to the '242 patent. The Patent and Trademark Office granted the '790 patent after notice of the '242 patent. The Patent and Trademark Office's grant of the '790 patent suggests that the '790 patent made substantial changes to the process taught in the '242 patent. *See Roton Barrier, Inc. v. Stanley Works*, 79 F.3d 1112, 1128 (Fed.Cir.1996) ("It is a truism that the fact that an accused device is itself patented does not preclude a finding that such device infringes an earlier patent of another. However, the fact of a second patent, depending on its subject matter, may be relevant to the issue of whether the changes are substantial.")

For the reasons explained above, the Court finds no genuine issue of material fact regarding Plaintiff Wooster Brush's alleged infringement of the '242 patent.



## **VII. Conclusion**

For the reasons state herein, the Court grants Plaintiff Wooster Brush's motion for summary judgment.

IT IS SO ORDERED.

## **JUDGMENT**

The Court has entered its memorandum opinion and order of decision in the above-captioned matter. For the reasons therein, the Court grants Plaintiff Wooster Brush's motion for summary judgment [Doc. 27].

Accordingly, this action is terminated pursuant to Fed.R.Civ.P. 58.

IT IS SO ORDERED.

N.D.Ohio,1999.

Wooster Brush Co. v. Newell Operating Co.

Produced by Sans Paper, LLC.