

United States District Court,
E.D. Virginia, Alexandria Division.

KNORR-BREMSE SYSTEME FUER NUTZFAHRZEUGE GMBH,
Plaintiff.

v.

DANA CORPORATION, et al,
Defendants.

Civil Action No. 00-803-A

Feb. 20, 2001.

Owner of patent for air disk brake sued competitor for infringement. On cross-motions for summary judgment, the District Court, Ellis, J., held that: (1) earlier version of accused product literally infringed, even if its brake application unit contained additional components not expressly required by claim language; (2) injunctive relief, but not damages, was warranted, given evidence that competitor had sold no infringing product in United States and had ceased production of it; and (3) fact issues precluded summary judgment on issue of whether new version of accused product was infringing.

Motions granted in part and denied in part.

5,927,445. Construed; Infringed.

John C. Lenahan, Jeffrey D. Sanok, Michael I. Coe, Evenson, McKeown, Edwards & Lenahan, P.L.L.C.,
Washington, DC, for Plaintiff.

Thomas C. Junker, Stephen D. Chace, LeClair Ryan, Alexandria, Wesley W. Whitmyer, Jr., Richard J.
Basile, St Onge, Steward, Johnston & Reens, L.L.C., Stamford, CT, for Defendants.

MEMORANDUM OPINION

ELLIS, District Judge.

In this patent infringement suit, plaintiff, a German brake manufacturer, sues three competitors in the field of air disk brakes for willful infringement of U.S. Patent No. 5,927,445 (the '445 patent). The suit initially targeted only one allegedly infringing product manufactured, sold or imported by defendants, namely the Mark II air disk brake. Yet, in the course of discovery, a second allegedly infringing product, the Mark III air disk brake, was added to the suit. As is common in patent infringement suits, the parties dispute the meaning of various terms and phrases used in the patent claims in issue, thereby necessitating a *Markman* FN1 hearing and ultimately resulting in the claim construction determinations recorded here. FN2 Based, in part, on their respective claim construction requests, the parties also move for summary judgment on various

infringement and damages issues pertaining to the Mark II and Mark III air disk brakes. For the reasons that follow, (i) plaintiff's motion for summary judgment as to literal infringement of the '445 patent by the Mark II air disk brake must be granted, (ii) defendants' motion for a finding of no damages arising out of defendants' literal infringement of the '445 patent by the Mark II air disk brake must be granted, and (iii) the parties' respective motions for summary judgment as to infringement or non-infringement of the Mark III air disk brake must be denied.

FN1. *Markman v. Westview Instruments*, 517 U.S. 370, 116 S.Ct. 1384, 134 L.Ed.2d 577 (1996) (question of disputed claim terms is a question of law).

FN2. This Memorandum Opinion memorializes rulings made from the Bench in the course of the *Markman* hearing held on November 27-28, 2000 and by Order dated November 28, 2000 and is issued simultaneously with the Findings of Fact and Conclusions of Law resulting from the four-day bench trial held on January 8-11, 2001. See *Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp., et al.*, Civil Action No. 00-803-A, Findings of Fact and Conclusions of Law, 133 F.Supp.2d 843 (E.D.Va.2001) (referred to throughout as *Knorr II*, 133 F.Supp.2d at ----).

I.

Plaintiff Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH (Knorr), a German brake manufacturer, is the owner by assignment of the '445 patent, issued by the Patent and Trademark Office on July 27, 1999. The '445 patent claims an invention in the field of air disk brakes used in large commercial road vehicles. Named as infringers of the '445 patent are (i) Dana Corporation, an American retailer of commercial vehicle products, (ii) Haldex Brake Products AB (Haldex AB), a Swedish manufacturer of various components of heavy vehicle braking systems, and (iii) Haldex Brake Products Corporation (Haldex Corp.), the American affiliate of Haldex AB.FN3 All three are major competitors of Knorr who, in the late 1990's, entered into a joint agreement to manufacture and offer for sale an air disk brake product in the United States. To this end, in 1999, defendants initially imported and offered for sale in the United States the first allegedly infringing product-the Mark II air disk brake-and subsequently, in the course of this litigation, defendants began importing and offering for sale in the United States the second allegedly infringing product-the Mark III air disk brake. Specifically, Knorr alleges that defendants' use of the Mark II and Mark III air disk brakes in the United States infringes claims 1-5 and 8-11 of the '445 patent. Defendants, in turn, deny infringement and, as is typical in patent infringement suits, challenge the validity of the '445 patent. The parties also dispute the meaning of various terms and phrases used in the patent claims in issue.

FN3. Unless otherwise noted, Haldex Brake Products AB and Haldex Brake Products Corporation are collectively referred to as Haldex.

Central to the claim construction task is, of course, an understanding of the patent.FN4 The '445 patent consists of 11 claims, nine of which are at issue here, namely claims 1-5 and 8-11. Claim 1, in particular, begins with a description of the prior art. In this regard, claim 1 describes the prior art as a "[d]isk brake for, road vehicles, having a caliper which comprises a brake disk and on one side of which a brake application unit is arranged which has a rotary lever swivellable by an operating cylinder, the rotary lever being capable of acting by means of an eccentric onto a bridge which can be displaced against a spring force in the

direction of the brake disk and has at least one adjusting spindle provided with a pressure piece..." Claim 1 then adds the following improvements to the prior art air disk brake:

FN4. For a more thorough discussion of the events leading up to the instant litigation and for a detailed explanation of the mechanics of the patented invention and the prior art, see *Knorr II*, 133 F.Supp.2d at 847. Also included as Appendix A to *Knorr II* is Figure 1 of the '445 patent, depicting the various components of the preferred embodiment of the patented invention. *See id.*

- a) the caliper is constructed in one piece such that the section of the caliper receiving the application unit is largely closed in a rearward area facing away from the brake disk, with the exception of an opening for the access of the operating cylinder, and
- b) the application unit is insertable as a preassembled unit into the caliper through the opening facing the brake disk when the caliper is removed from the brake disk.

Claims 2, 3, 4, 5 and 8 are dependent claims that add certain elements to the claimed invention. For example, claim 2 adds an element to claim 1, from which it depends, in that "the opening of the caliper facing the brake disk, when the application unit is inserted, is closed off by a closing plate which is penetrated by at least one pressure piece." Claim 4, also depending from claim 1, requires that the brake application unit be "joined together as a preassembled unit by means of a bow element." Claims 3 and 5, which depend, respectively, from claims 2 and 4, add the identical element that "the pressure pieces are in each case sealed off by means of bellows with respect to the closing plate penetrated by them." Claim 8, which depends from claim 1, then requires that the closing plate be screwed to the caliper by means of studs.

Claim 9 of the '445 patent is an independent claim pertaining to assembly, requiring (i) a brake disk, (ii) a caliper and (iii) a brake application unit that includes a rotary lever, an eccentric, a displaceable bridge, at least one adjusting spindle and at least one pressure piece. Like claim 1, claim 9 requires that the caliper be formed in one piece, with the section of the caliper receiving the brake application unit being substantially closed in an end area. Claim 9 also requires that the brake application unit be insertable as a preassembled unit into the caliper through an opening facing the brake disk. Claim 10, which depends from claim 9, then requires that the caliper opening be closed off by a closing plate that is penetrated by at least one pressure piece.

Finally, claim 11, an independent method claim, recites the following three-step method for making the claimed invention: (i) forming a one-piece caliper that is largely closed in a rearward area facing away from the brake disk, (ii) preassembling a brake application unit that includes a rotary lever capable of acting by an eccentric to selectively push at least one brake shoe against the brake disk, and (iii) inserting the preassembled brake application unit into the caliper through an opening facing the brake disk, and then closing this opening with a cover plate that is penetrated by a pressure piece capable of acting against at least one brake shoe.

At issue here are the parties' disputes concerning the meaning of the following six terms used in the patent claims in issue: (1) "caliper;" (2) "one-piece caliper;" (3) "preassembled;" (4) "largely closed" and "substantially closed;" (5) "rearward area" and "end area" and (6) "application unit." Also at issue are the parties' cross-motions for summary judgment on various infringement and damages issues pertaining to the Mark II and Mark III air disk brakes which, in turn, depend on the proper construction of the patent claims.

II. Claim Construction

A. Legal principles

[1] [2] [3] *Markman*, a watershed event in patent litigation, established once and for all that the construction of patent claims is a matter of law exclusively for the court. *See Markman*, 517 U.S. 370, 116 S.Ct. 1384. In this regard, the principal guide in the interpretation of claim language is the intrinsic evidence, which includes the patent claims and specification, and the patent's prosecution history, colloquially referred to as the "file wrapper." *See Hockerson-Halberstadt, Inc. v. Avia Int'l, Inc.*, 222 F.3d 951, 955 (Fed.Cir.2000); *Vitronics Corp. v. Conceptronic*, 90 F.3d 1576, 1582-83 (Fed.Cir.1996). Thus, "[a] claim is construed in the light of the claim language, the other claims, the prior art, the prosecution history, and the specification, not in light of the accused device." *SRI Int'l v. Matsushita Electric Corp. of America*, 775 F.2d 1107, 1118 (Fed.Cir.1985). It is only after the patent claims have been construed without reference to the accused device that the claims, as so construed, are then applied to the accused device to determine whether infringement exists. *See id.*

[4] [5] [6] Analysis of the intrinsic evidence focuses first, on the patent claims themselves. *See Hockerson-Halberstadt*, 222 F.3d at 955; *Vitronics*, 90 F.3d at 1582. Claim terms are to be given their ordinary and customary meaning unless it appears that the inventor clearly stated an alternative definition in the patent specification or file wrapper. *See Athletic Alternatives, Inc. v. Prince Mfg. Inc.*, 73 F.3d 1573, 1578 (Fed.Cir.1996). In other words, claim terms are given their plain meaning unless the inventor, "choosing to be his or her own lexicographer," uses terms in a manner other than their ordinary meaning and clearly discloses these special or alternative meanings in the patent specification or file history. *See Vitronics* 90 F.3d at 1582; *Beachcombers v. WildeWood Creative Products, Inc.*, 31 F.3d 1154, 1158 (Fed.Cir.1994). Courts may rely on dictionary definitions when construing claim terms "so long as the dictionary definition does not contradict any definition found in or ascertained by a reading of the patent documents." *Vitronics*, 90 F.3d at 1584 n. 6. And, technical terms are taken to have the meaning that they would ordinarily have in the field of the invention, "unless it is shown that the inventor used the term with a special meaning and that persons of skill in the field would so understand the usage." *See Pall Corp. v. HemaSure, Inc.*, 181 F.3d 1305, 1309 (Fed.Cir.1999).

[7] An important principle in aid of claim construction is the doctrine of claim differentiation, which presumes that there is "a difference in meaning and scope when different words or phrases are used in separate claims." *Comark Communications, Inc. v. Harris Corp.*, 156 F.3d 1182, 1187 (Fed.Cir.1998) (quoting *Tandon Corp. v. United States Int'l Trade Comm'n*, 831 F.2d 1017, 1023 (Fed.Cir.1987)). Under the doctrine of claim differentiation, if the absence of such a difference in meaning or scope would make a claim superfluous, it is presumed that the difference between the claims is significant. *See Comark*, 156 F.3d at 1187. Equally important as the doctrine of claim differentiation is the principle that claim terms must be interpreted consistently throughout the patent claims. *See Southwall Technologies, Inc. v. Cardinal IG Co.*, 54 F.3d 1570, 1579 (Fed.Cir.1995).

[8] [9] [10] In the event the claim language is not alone dispositive, analysis should focus next on the patent's specification, including the drawings and figures depicting the preferred embodiments of the invention. The patent specification is "highly relevant to the claim construction analysis" and offers "the single best guide to the meaning of a disputed [claim] term." *Vitronics*, 90 F.3d at 1582. Patent claims are thus construed in light of the specification, and in this regard, the claims and specification are both read with a view to ascertaining the invention. *See Gentry Gallery, Inc. v. Berkline Corp.*, 134 F.3d 1473, 1479

(Fed.Cir.1998). And, consistent with the principle that the patented invention is defined by the claims, it is axiomatic that limitations included in the specification, including functional limitations, cannot be imported into the claims where no such limitations exist in the claims. *See* *Burke, Inc. v. Bruno Independent Living Aids, Inc.*, 183 F.3d 1334, 1340 (Fed.Cir.1999). It is also fundamental that a patentee is entitled to claim his or her invention broadly and is not limited to the preferred embodiment disclosed in the specification. *See* *Dow Chemical Co. v. United States*, 226 F.3d 1334, 1341-42 (Fed.Cir.2000); *Kemco Sales, Inc. v. Control Papers Co., Inc.*, 208 F.3d 1352, 1362 (Fed.Cir.2000). Yet, a proposed claim interpretation that would exclude the preferred embodiment would rarely, if ever, be correct. *See* *Vitronics*, 90 F.3d at 1583.

[11] [12] [13] Courts may also refer to the patent's prosecution history in interpreting disputed claim terms. The prior art cited in the prosecution history, for instance, informs what the patent claims do not cover. *See* *Vitronics*, 90 F.3d at 1583. Courts have broad power to look at the prosecution history to determine "the true meaning of language used in the patent claims," since this history may demonstrate the patentee's understanding and use of the relevant terms at the time of the application. *See* *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed.Cir.1995). The prosecution history may not be used, however, to "enlarge, diminish, or vary the limitations in the claims." *Id.* Moreover, a patentee may not construe a claim term one way during prosecution in order to obtain allowance of the patent and then in a different way during litigation in order to obtain a finding of infringement. *See* *Southwall*, 54 F.3d at 1576.

[14] [15] [16] If no ambiguity is found in the meaning of the patent claim terms after consideration of the intrinsic evidence, including the patent claims themselves, the specification and the prosecution history, then the claim construction inquiry is at an end. Yet, in those relatively rare instances where the intrinsic evidence is not sufficient to resolve ambiguities in the claim language, courts may resolve the dispute by reference to extrinsic evidence, namely material outside the patent and its file history, such as expert testimony, learned treatises and the like. *See* *Vitronics*, 90 F.3d at 1583. In any event, trial courts may always use extrinsic evidence in aid of understanding the general technology involved in the patent claims at issue, but not to vary or contradict the claims. *See* *Vitronics*, 90 F.3d at 1584 n. 6. To this end, even the testimony of the inventor of the claimed invention may not be used to vary or contradict the clear meaning of the disputed claim language. *See id.* at 1584. Indeed, an inventor's testimony on claim construction "amounts to no more than legal opinion" which the court has complete discretion to exclude or ignore. *See* *Markman*, 52 F.3d at 983.

[17] Ultimately, the interpretation to be given a particular patent claim term must be determined based on what the inventors actually intended to envelop within the claim. *See* *Renishaw PLC v. Marposs Societa' per Azioni*, 158 F.3d 1243, 1250 (Fed.Cir.1998). And in this regard, "the construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Id.* These principles control the construction of the claim terms at issue.

B. Disputed terms

The parties dispute the meaning of the following six terms used throughout the '445 patent claims: (1) "caliper;" (2) "one-piece caliper;" (3) "preassembled;" (4) "largely closed" and "substantially closed;" (5) "rearward area" and "end area" and (6) "application unit." Each of these claim terms can be given its ordinary and customary meaning, in light of the intrinsic evidence, as the inventors of the '445 patent did not clearly state any alternative definitions for these particular terms in the patent specification or file wrapper. *See* *Vitronics*, 90 F.3d at 1582. Thus, resort to extrinsic evidence is unnecessary, and indeed improper, in this instance for any purpose other than to aid the Court in gaining a general understanding of

the pertinent technology. *See* Hockerson-Halberstadt, 222 F.3d at 955 (recognizing that "[i]f the meaning of a claim is unambiguous from the intrinsic evidence, then a court may not rely on extrinsic evidence for purposes of claim construction.").

[18] The first disputed term, "caliper," is generally understood in the automotive industry to be "a structure composed of those housing portions that engage about the brake disk and contain a brake application unit." *See* Pall, 181 F.3d at 1309 (recognizing that technical terms are taken to have the meaning that they would ordinarily have in the field of the invention). Defendants attempt to add a functional limitation to this essentially structural definition, namely that the caliper is a structure that absorbs the brake reaction force generated by the brake application unit. Yet, because the '445 patent claims do not expressly require that the caliper absorb the brake reaction force, such a functional limitation should not be imported into the patent claims from the specification. *See* Burke, 183 F.3d at 1340.

[19] [20] [21] The plain meaning of the next disputed term, "one piece caliper," as confirmed by reference to a standard dictionary, is "a caliper constructed or formed as a single, integral piece." *See Webster's Third New International Dictionary* 1576 (1993). The same dictionary also identifies the plain meaning of the next disputed term, "preassembled," as simply "assembled beforehand." *See id.* at 1783. Likewise, standard dictionary definitions establish that the plain meaning of the terms "largely closed" and "substantially closed," used interchangeably throughout the '445 patent claims and specification, is "for the most part, to a large degree, or in the main closed." *See id.* at 1273, 2280.

[22] [23] A review of the specification compels the conclusion that the disputed terms "rearward area" and "end area," also used interchangeably throughout the '445 patent claims and specification, are correctly defined as "the area facing away from the brake disk." *See* '445 Patent Specification, Column 1, lines 54-57 (providing that "a direct transmission of the braking forces into the caliper is permitted since the rearward area, *which faces away from the brake disk*, of the caliper receiving the application unit is essentially closed...") (emphasis added). The specification also teaches that the last disputed term, "application unit," is properly defined as "a mechanical mechanism that multiplies an input force using a lever to provide a greater output force that presses the brake shoes against the brake disk."

III. Summary judgment

A. Legal principles

[24] After the disputed claim terms have been properly construed as a matter of law, summary judgment should be entered when no genuine issue of material fact exists with respect to application of the patent claims to the alleged infringing device. *See* London v. Carson Pirie Scott & Co., 946 F.2d 1534, 1537 (Fed.Cir.1991). Thus, if the plaintiff establishes by a preponderance of the evidence that there is no genuine issue of material fact as to whether the correctly interpreted claims of the patent read upon the accused device, then there is literal infringement as a matter of law and summary judgment on the issue of literal infringement is proper. *See* Black & Decker, Inc. v. Universal Security Instruments, Inc., 931 F.Supp. 427, 429 (E.D.Va.1996). Nor is this an unusual result in post-*Markman* patent litigation. *See, e.g.,* Northern Telecom Limited v. Samsung Electronics Co., Ltd., 215 F.3d 1281 (Fed.Cir.2000) (partial summary judgment on claim construction and literal infringement granted on appeal); Karlin Technology, Inc. v. Surgical Dynamics, Inc., 177 F.3d 968 (Fed.Cir.1999) (reversing denial of summary judgment of literal infringement); Johnson Worldwide Associates, Inc. v. Zebco Corp., 175 F.3d 985 (Fed.Cir.1999) (affirming summary judgment of literal patent infringement).

[25] Even if an accused device does not literally infringe a patent, infringement may nonetheless exist under the doctrine of equivalents ("DOE"). *See Warner-Jenkinson Co., Inc. v. Hilton Davis Chemical Co.*, 520 U.S. 17, 40-41, 117 S.Ct. 1040, 137 L.Ed.2d 146 (1997); *Graver Tank & Mfg. Co. v. Linde Air Products Co.*, 339 U.S. 605, 608, 70 S.Ct. 854, 94 L.Ed. 1097 (1950). To find DOE infringement, the accused product must include only insubstantial differences from the claimed invention or, put another way, the alleged infringing product must perform substantially the same function, in substantially the same way, to achieve the same result as the claimed invention. *See Warner-Jenkinson*, 520 U.S. at 40-41, 117 S.Ct. 1040.

B. The Mark II air disk brake

[26] Knorr requests summary judgment in its favor as to the Mark II air disk brake, arguing specifically that every element of claims 1-5 and 8-11 of the '445 patent literally reads on the Mark II device. Defendants, in turn, request summary judgment in their favor as to the Mark II air disk brake, arguing that such device does not infringe the '445 patent, either literally or under the doctrine of equivalents. Defendants' position in this regard is based on a single argument, namely that the brake application unit in the Mark II air disk brake includes certain adjustment and de-adjustment shafts that are removable from, and therefore not "preassembled" with the other components of, the Mark II brake application unit, as required by claims 1-5 and 8-11 of the '445 patent. Literal infringement analysis is thus limited to this one specific issue, as defendants do not dispute that the remaining elements of claims 1-5 and 8-11 of the '445 patent literally read on the Mark II air disk brake. *See Stipulated Statement of Uncontested Facts* (docket entry 139); defendants' reply brief to plaintiff's motion for summary judgment and cross-motion for partial summary judgment (docket entry 110).

The question of literal infringement, like that of claim construction, properly begins with the language of the patent claims themselves. And in this regard, the various claims of the '445 patent require that the brake application unit of the claimed invention include certain specified components. For instance, independent claim 1 requires that the brake application unit contain (i) a rotary lever, (ii) an eccentric, (iii) a bridge, (iv) a spring force, (v) at least one adjusting spindle, and (vi) at least one pressure piece. Claims 2-5 and 8, since each derives from claim 1, likewise require the brake application unit to contain the six elements specified in claim 1. Independent claim 9 and dependent claim 10, in turn, require that the brake application unit contain all of these six elements except the spring force, which is not expressly required by claims 9 and 10. Claim 11, then, requires only that the brake application unit contain a rotary lever and an eccentric.FN5

FN5. Despite the differences from claim to claim in some of the elements required to be included in the brake application unit, it is clear that each version of the brake application unit, in use, works to apply braking forces to the brake disk. That is, each works to "multipl[y] an input force using a lever to provide a greater output force that presses the brake shoes against the brake disk." Significantly, the adjustment and de-adjustment shafts contained in the Mark II air disk brake play no part in multiplying an input force or applying the input force against the brake shoes. Rather, as their name suggests, they serve only an adjustment function.

Defendants concede, as they must, that the brake application unit contained in the Mark II air disk brake includes each of the components specifically identified in claims 1-5 and 8-11 of the '445 patent. This concession on the part of defendants essentially ends the matter. Indeed, under established claim construction principles, any additional components not expressly required by the claim language, such as the adjustment and de-adjustment shafts suggested by defendants, cannot be imported into the '445 patent

claims as additional claim limitations. *See* Burke, 183 F.3d at 1340. To this end, any particular components of the brake application unit that are included in either the preferred embodiment of the '445 patent or the figures depicting the claimed invention, but that are not required by the '445 patent claims themselves, cannot be read into the patent claims as limitations. *See* Comark, 156 F.3d at 1187. For this reason alone, defendants' argument against literal infringement of the Mark II air disk brake lacks merit.

Defendants' non-infringement argument fails for yet another reason, as well. In addition to specifying the required elements of the brake application unit, all of the '445 patent claims in issue require that the brake application unit be insertable or inserted as a preassembled unit into the one-piece caliper. The undisputed record reflects that the components of the Mark II brake application unit that are specifically required by the '445 patent claims are indeed preassembled, along with the various other components of the Mark II brake application unit, prior to insertion of the Mark II brake application unit into the Mark II one-piece caliper. And, although not necessary to the infringement analysis (because the adjustment and de-adjustment shafts are not required by any of the '445 patent claims), the record also reflects that the adjustment and de-adjustment shafts included in the Mark II brake application unit are, in fact, preassembled with the other components of the Mark II brake application unit. Specifically, the adjustment and de-adjustment shafts (i) are inserted into the spindles of the Mark II brake application unit, (ii) have elongated splined portions which engage corresponding splines on the internal surface of the spindles of the Mark II brake application unit, and (iii) are secured radially in the spindles and axially by the extended length of the mating connection between the shafts and the spindles.

Put simply, the Mark II brake application unit contains each and every element required by the '445 patent claims in issue and, in use, the Mark II brake application unit is inserted into the Mark II one-piece caliper as a preassembled unit. Because the '445 patent claims require nothing more, literal infringement by the Mark II air disk brake is clear. In other words, as the remaining elements of claims 1-5 and 8-11 of the '445 patent literally read on the Mark II air disk brake, summary judgment in Knorr's favor as to literal infringement of the Mark II air disk brake is proper.FN6

FN6. The question of DOE infringement as to the Mark II air disk brake is neither reached nor decided. *See* Minnesota Mining and Manufacturing Co. v. Johnson & Johnson Orthopaedics, Inc., 976 F.2d 1559, 1572 (Fed.Cir.1992) (recognizing that it is unnecessary to consider infringement under the doctrine of equivalents where literal infringement exists).

[27] Given the presence of literal infringement as to the Mark II air disk brake, the next logical step is to consider an appropriate remedy for Knorr based on this literal infringement.FN7 On this issue, defendants request a finding of no damages, as Knorr has proffered no proof of monetary damages as a result of defendants' use of the Mark II air disk brake. Indeed, the record conclusively establishes that defendants have not sold any Mark II air disk brakes in the United States and do not intend to sell any such devices in the United States at any time in the future, as all manufacturing and production of the Mark II air disk brake has now ceased. It is also established that Haldex did not receive any compensation from Dana for any Mark II air disk brakes imported into the United States. In the circumstances, Knorr does not oppose defendants' request for a finding of no infringement damages as to the Mark II air disk brake, and summary judgment in defendants' favor on this particular issue is therefore appropriate. Even so, Knorr is nonetheless entitled to injunctive relief addressing any future use of the Mark II air disk brake by defendants and, if established at trial, attorney's fees pursuant to 35 U.S.C. s. 285.FN8

FN7. Upon a finding of infringement, an award of damages adequate to compensate the patentee for such infringement, and in no event less than a reasonable royalty, is recoverable by a patent owner. *See* 35 U.S.C. s. 284. In this regard, the patent owner bears the burden of proving the appropriate amount of damages. *See* *SmithKline Diagnostics, Inc. v. Helena Laboratories Corp.*, 926 F.2d 1161, 1164 (Fed.Cir.1991).

FN8. Title 35 U.S.C. s. 285 authorizes the court "in exceptional cases" to award "reasonable attorney's fees to the prevailing party." 35 U.S.C. s. 285.

C. The Mark III air disk brake

[28] Both sides also move for summary judgment as to the Mark III air disk brake, Knorr claiming that this brake, like its predecessor, the Mark II air disk brake, infringes claims 1-5 and 8-11 of the '445 patent, either literally or under the doctrine of equivalents. For their part, defendants deny infringement by the Mark III device under either infringement analysis and challenge the validity of the '445 patent. Defendants' non-infringement argument focuses sharply on two arguments: (i) that the Mark III air disk brake includes a two-piece caliper, rather than a one-piece caliper, and (ii) that the Mark III caliper is not "largely closed in a rearward area." Were defendants' arguments to prevail, the Mark III air disk brake would not literally infringe any of the '445 patent claims in issue. As it happens, however, summary judgment is inappropriate as to both arguments, as the current record reflects that genuine issues of material fact are still in dispute regarding these and other issues pertaining to the Mark III air disk brake. Accordingly, the parties' respective motions for summary judgment as to the Mark III air disk brake must be denied. *See Black & Decker*, 931 F.Supp. at 429.

An appropriate order issued on November 28, 2000.

E.D.Va.,2001.

Knorr-Bremse Systeme Fuer Nutzfahrzeuge GmbH v. Dana Corp.

Produced by Sans Paper, LLC.