



Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.

72 F.3d 857 (1995) | Cited 14 times | Federal Circuit | December 14, 1995

NEWMAN, Circuit Judge.

Shoketsu Kinzoku Kogyo Kabushiki Co., Ltd., also known as SMC Corporation, and SMC Pneumatics, Inc. (collectively SMC) seek reversal of the judgment of the United States District Court for the District of Massachusetts,¹ holding that SMC had infringed two patents owned by Festo Corporation and assessing damages. The patents relate to magnetically coupled rodless cylinders wherein the follower moves by magnetic attraction to the piston, which is moved hydraulically or pneumatically. We affirm the judgment. I

SUMMARY JUDGMENT - THE CARROLL PATENT

Before trial the district court granted Festo's motion for partial summary judgment, finding infringement of United States Patent No. 3,779,401 (the Carroll patent) under the doctrine of equivalents. SMC, appealing this judgment, argues that in summarily finding infringement the trial Judge engaged in impermissible fact-finding, contrary to the appropriate standard for Rule 56 determinations. We review the summary judgment for correctness of the process, as well as for its legal Conclusion. The grant of summary judgment is given plenary review on appeal.

Summary judgment is appropriate when "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." Fed. R. Civ. P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322, 91 L. Ed. 2d 265, 106 S. Ct. 2548 (1986). A material fact is one whose finding is necessary to the proceedings. *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248, 91 L. Ed. 2d 202, 106 S. Ct. 2505 (1986). A genuine issue of material fact is shown to exist if sufficient evidence is presented whereby a reasonable fact finder could decide the question in favor of the nonmoving party. *Id.* The evidence submitted by the nonmovant, in opposition to a motion for summary judgment, "is to be believed, and all justifiable inferences are to be drawn in his favor." *Id.* at 255.

In ruling on a motion for summary judgment the court must bear in mind the actual quantum and quality of proof necessary to support liability under the applicable law. *Id.* at 254. It is the opposing party's responsibility to raise issues of material fact that would make summary judgment inappropriate. *Matsushita Elec. Indus. Co. v. Zenith Radio Corp.*, 475 U.S. 574, 585-87, 89 L. Ed. 2d 538, 106 S. Ct. 1348 (1986). The court must assess the adequacy of the nonmovant's response and must determine whether the showing the nonmovant asserts it would have made at trial would be



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sufficient to sustain its position. See *Celotex*, 477 U.S. at 322.

The infringement issue concerning the Carroll patent, which expired in 1990, was focused on reexamined claim 9, shown in the margin.² All of the claim elements were conceded to be literally present in the accused devices except for both members of the pair of resilient sealing rings. SMC stated to the special master "We've decided that we will not be presenting any testimony concerning infringement." Absent evidence that placed in dispute the facts of infringement, summary judgment could properly be granted on undisputed facts.

In granting summary judgment that the claim was infringed, the district court observed that SMC offered no evidence to refute Festo's assertion that substantially the same function was performed, in substantially the same way with the same result, by the claimed pair of resilient sealing rings when situated one at each end of the central mounting member, and by SMC's single ring situated at the end contacted by the pressure fluid. Although SMC now argues that there has not been compliance with the "all elements rule" of *Pennwalt Corp. v. Durand-Wayland, Inc.*, 833 F.2d 931, 935, 4 U.S.P.Q.2D (BNA) 1737, 1739-40 (Fed. Cir. 1987) (in banc), cert. denied, 485 U.S. 961, 485 U.S. 1009, 99 L. Ed. 2d 426, 108 S. Ct. 1226 (1988), we take note that, as held in *Dolly, Inc. v. Spalding & Evenflo Cos.*, 16 F.3d 394, 398, 29 U.S.P.Q.2D (BNA) 1767, 1769 (Fed. Cir. 1994) and *Intel Corp. v. Int'l Trade Comm'n*, 946 F.2d 821, 832, 20 U.S.P.Q.2D (BNA) 1161, 1171 (Fed. Cir. 1991), there need not be one-to-one correspondence between the components of an accused device and the claimed invention. It was not disputed that the rings served the primary function of providing a tight seal at the end contacted by the pressure fluid. There was undisputed evidence to support a finding that the two-way seal employed by SMC, as used in the accused device, corresponds to the two resilient sealing rings of the claimed invention. On the record that was the basis of the motion for summary judgment we do not discern reversible error in the court's grant of summary judgment of infringement as to the Carroll patent. That judgment is affirmed.

II

THE JURY TRIAL

The remaining issues were tried to the jury. The jury found valid the Carroll patent and the Stoll patent (United States Patent No. 4,354,125), found the Stoll patent infringed, and assessed damages. The district court entered judgment on the jury verdict, denying duly made post-trial motions. The issues appealed relate only to infringement and damages; no appeal is taken on the issue of validity of either the Carroll or the Stoll patent.

We review the jury verdict to ascertain whether there was substantial evidence whereby a reasonable jury could have reached the verdict that was reached. Substantial evidence is such relevant evidence, on the record as a whole, as could be accepted by a reasonable mind as adequate to support the verdict. *Perkin-Elmer Corp. v. Computervision Corp.*, 732 F.2d 888, 893, 221 U.S.P.Q. (BNA) 669, 673



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(Fed. Cir.), cert. denied, 469 U.S. 857, 83 L. Ed. 2d 120, 105 S. Ct. 187 (1984). The court must consider the evidence in the light most favorable to the party in whose favor the jury found, and must not substitute its choice for the jury's in drawing factual inferences or deciding between conflicting evidence. *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1580, 24 U.S.P.Q.2D (BNA) 1401, 1419 (Fed. Cir. 1992).

A. Infringement of the Stoll Patent

Stoll patent claim 1 is shown in the margin.³ The issue of infringement focused on the claim clauses relating to the guide rings and sealing rings, for some of the accused devices contained four rings and some contained only three rings; and to the magnetizable material in the sleeve of the follower. The presence of all other claim elements and limitations in the accused devices was conceded. We confirmed in *Hilton Davis Chem. Co. v. Warner-Jenkinson Co.*, 62 F.3d 1512, 35 U.S.P.Q.2D (BNA) 1641 (Fed. Cir. 1995) (en banc) that the fundamental inquiry with respect to equivalency is whether the accused device is substantially the same as the patented invention, affirming the utility of the function/way/result test for substantial identity, and the relevance of objective considerations such as copying or independent development.

Both sides presented testimony and made cogent arguments at trial on the merits of their respective positions on the technologic aspects of equivalency. There was expert testimony on behalf of Festo that the SMC cylinder having a follower using an aluminum alloy sleeve encircling the magnets is substantially the same as the claimed cylinder wherein the sleeve is made of "magnetizable material," and that both serve the function of reducing magnetic leakage. Festo's expert witness in the field of physics and magnetism, Dr. Schroeder, explained that because of the small gap, any magnetic flux leaking from the cylinder is very small. He showed the tests he conducted on the SMC sleeve, and explained the evidence that a 300% reduction in magnetic leakage fields was produced by the SMC sleeve. Dr. Schroeder explained how he analyzed the composition of the SMC sleeve and compared it to the sleeve described in the patent. He testified that the SMC sleeve formed a magnetic circuit in substantially the same way as the sleeve of the patent, that it served the same function of shielding and minimizing leakage fields, and that it obtained substantially the same result of avoiding undesirable braking forces.

There was also evidence before the jury concerning the double rings at each end of the central member. SMC argues that the omission of one of the sealing rings precludes a finding of infringement, under the "all elements rule" of *Pennwalt*. However, this rule does not require a one-to-one correspondence of components. See, e.g., *Dolly v. Spalding*, 16 F.3d at 398, 29 U.S.P.Q.2D (BNA) at 1769; *Intel v. ITC*, 946 F.2d at 832, 20 U.S.P.Q.2D (BNA) at 1171. There was testimony concerning the effect of the omission by SMC of one of the four rings, and the effect of the location of the omitted ring distal from the pressure medium. Festo presented testimony that the use by SMC of a guiding ring at both ends, retaining the wiping/sealing ring only at the end adjacent the pressure medium, corresponded to and was equivalent to the claimed ring structure, and that the SMC ring



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structure would still improve the life of the piston, although not as effectively as would the use of two rings at both ends. Inefficient infringement is still infringement. *Laitram Corp. v. Cambridge Wire Cloth Co.*, 863 F.2d 855, 859, 9 U.S.P.Q.2D (BNA) 1289, 1294 (Fed. Cir. 1988), cert. denied, 490 U.S. 1068, 104 L. Ed. 2d 634, 109 S. Ct. 2069 (1989).

A verdict of infringement must be sustained if reasonable jurors, viewing the evidence as a whole, could have found the facts needed to reach the verdict that was reached, in light of the applicable law. It is our obligation to defer to the trier of fact when we come upon substantial evidence to support the verdict. We neither make our own findings as if there had been no trial, nor attempt to reconstruct the entire trial on a paper record. *Anderson v. City of Bessemer City*, 470 U.S. 564, 573, 84 L. Ed. 2d 518, 105 S. Ct. 1504 (1985) ("The reviewing court oversteps the bounds of its duty under Rule 52(a) if it undertakes to duplicate the role of the lower court. . . . 'Appellate courts must constantly have in mind that their function is not to decide factual issues de novo.'") (quoting *Zenith Radio Corp. v. Hazeltine Research, Inc.*, 395 U.S. 100, 123, 23 L. Ed. 2d 129, 89 S. Ct. 1562 (1969)).

Although the differing expert opinions reflect the closeness of the technologic facts, there was substantial evidence whereby a reasonable jury could have found infringement of the Stoll patent in terms of the doctrine of equivalents. See *Transnational Corp. v. Rodio & Ursillo, Ltd.*, 920 F.2d 1066, 1068 (1st Cir. 1990) ("In reviewing the jury verdict, we are compelled even in a close case, 'to uphold the verdict unless the facts and inferences, when viewed in a light most favorable to the party for whom the jury held, point so strongly and overwhelmingly in favor of the movant that a reasonable jury could not have arrived at this Conclusion.'") (quoting *Chedd-Angier Production Co. v. Omni Publications Int'l Ltd.*, 756 F.2d 930, 934 (1st Cir. 1985)).

B. Prosecution History Estoppel

The issue of prosecution history estoppel is raised by SMC on appeal. At trial, counsel correctly stated that "This is not really a prosecution history estoppel case." Counsel argues that it is now our obligation to determine the scope and meaning of claim terms de novo. Indeed *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 970-71, 34 U.S.P.Q.2D (BNA) 1321, 1322 (Fed. Cir. 1995) (en banc) requires independent determination of the construction of the claims, as a matter of law, unencumbered by the trial process. However, the issue of estoppel, to the extent that it was raised at trial, was aired in extensive testimony by the inventor and by expert witnesses on both sides, all directed to the meaning of "magnetizable material." Related factual issues were also disputed, such as the reason for the addition of this limitation to the claims.

Festo argues that prosecution history estoppel does not bar a finding of equivalency when a descriptive term in the claim was not required to be included in order to overcome prior art. See *Hilton Davis*, 62 F.3d at 1525, 35 U.S.P.Q.2D (BNA) at 1651 ("Nor does prosecution history estoppel preclude application of the doctrine of equivalents in this case. Whenever prosecution history estoppel is invoked as a limitation to infringement under the doctrine of equivalents, a close



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examination must be made as to, not only what was surrendered, but also the reason for such a surrender.") (internal quotation marks and citations omitted). As discussed in *Vaupel Textilmaschinen KG v. Meccanica Euro Italia S.p.A.*, 944 F.2d 870, 882, 20 U.S.P.Q.2D (BNA) 1045, 1054 (Fed. Cir. 1991), in determining whether prosecution history estoppel applies when there has been a change in claim language during prosecution, the court must consider both what was changed and the reason for the change. The scope of any asserted estoppel is determined in light of the prior art in the field of art relevant to the change, the statements made to the patent examiner as to the reason for the change, and the purpose of the change as it relates to the allowance of the claims. See *Mannesmann Demag Corp. v. Engineered Metal Prods. Co.*, 793 F.2d 1279, 1284-85, 230 U.S.P.Q. (BNA) 45, 48 (Fed. Cir. 1986).

In this case the description of the sleeve as made of magnetizable material was added during prosecution. The reason for the addition was not stated in the prosecution history, was vigorously disputed at trial, and was not at all clear to the trial Judge, who called the addition "a mystery." At the trial there was testimony by the inventor and by experts on both sides, accompanied by extensive argument of counsel. The prosecution record was before the jury, as was the inventor. The trial Judge did not hold Festo estopped to argue that there was equivalency between the SMC aluminum alloy sleeve and the claimed magnetizable sleeve. We do not discern error of law in this ruling, and indeed there were before the jury SMC's arguments on the technologic facts. Also before the jury were the special master's contrary findings. The special master, as discussed post, had found that there was prosecution history estoppel barring Festo's assertion of equivalency.

No objection was raised to the district court's instructions on the law of estoppel, or to the presentation of the broad issue to the jury as part of the evidence relating to infringement. See Fed. R. Civ. P. 51 ("No party may assign as error the giving or the failure to give an instruction unless that party objects thereto before the jury retires . . .") We do not discern reversible error in these proceedings. Taking note of the substantial evidence of technologic identity of function, way, and result in the circumstances of actual use wherein the leakage of magnetic flux from the cylinder was small, and the disputed facts underlying the issue of estoppel, we conclude that the judgment of infringement of the Stoll patent must be sustained.

C. The Special Master

SMC argues that the reference to a special master deprived it of the right to trial by jury, in that the master's report was before the jury. SMC also objects that it was required to try the entire case twice, first to the master and then to the jury. We are sympathetic to the burden on the parties and the cost of two trials. However, this was not a matter of simply turning the case over to a master, as SMC argues, for the case was fully tried, and decided, by Judge and jury.

The federal courts have certain inherent powers to appoint persons unconnected with the court to aid Judges in the performance of specific duties. *Ex parte Peterson*, 253 U.S. 300, 312, 64 L. Ed. 919,



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40 S. Ct. 543 (1920) (appointment of auditor to define and simplify the issues); *Constant v. Advanced Micro-Devices, Inc.*, 848 F.2d 1560, 1566-67, 7 U.S.P.Q.2D (BNA) 1057, 1060 (Fed. Cir.), cert. denied, 488 U.S. 892, 102 L. Ed. 2d 218, 109 S. Ct. 228 (1988) (special master made recommendations on issues of validity and infringement). Consent of the parties is not required. *Peterson*, 253 U.S. at 312-14. SMC states that it objected to the appointment of a master on the ground that trial to the master should not replace the requested jury trial. However, the jury trial was not replaced. A full jury trial was held, except for the issue concerning the Carroll patent that was decided by summary judgment. Rule 53(b) states in part:

Rule 53(b) Reference. A reference to a master shall be the exception and not the rule. In actions to be tried by a jury, a reference shall be made only when the issues are complicated; in actions to be tried without a jury, save in matters of account and of difficult computation of damages, a reference shall be made only upon a showing that some exceptional condition requires it. . . .

The trial Judge to whom this case was first assigned deemed the case to be sufficiently complicated to be referred to a special master, to conduct a hearing on the issues of patent validity and infringement and to make recommendations on those issues. The successor trial Judge, sharing the view that the issues were complicated, continued the reference. In a non-jury trial, complexity alone does not warrant reference to a master; "On the contrary, we believe that this is an impelling reason for trial before a regular, experienced trial Judge rather than before a temporary substitute appointed on an ad hoc basis and not ordinarily experienced in judicial work." *La Buy v. Howes Leather Co.*, 352 U.S. 249, 259, 1 L. Ed. 2d 290, 77 S. Ct. 309 (1957). However, the strict "exceptional condition" standard of Rule 53(b) relates only to actions tried without a jury. Thus the district court did not abuse its discretion in referring the complex technologic issues of validity and infringement to a special master.

The master apparently conducted a full trial of these issues, and produced a detailed report. Rule 53(e)(3) permits the master's report to be presented along with other evidence for consideration by the jury:

Rule 53(e)(3) In Jury Actions. In an action to be tried by a jury the master shall not be directed to report the evidence. The master's findings upon the issues submitted to the master are admissible as evidence of the matters found and may be read to the jury, subject to the ruling of the court upon any objections in point of law which may be made to the report.

See *Crateo, Inc. v. Intermark, Inc.*, 536 F.2d 862, 868 (9th Cir.) (findings of special master are admissible as evidence and may be read to the jury; Rule 53(e)(3) does not require master to personally read findings, or to be made available for cross-examination), cert. denied, 429 U.S. 896, 50 L. Ed. 2d 180, 97 S. Ct. 259 (1976); *Peterson*, 253 U.S. at 310-11:

The report will, unless rejected by the court, be admitted at the jury trial as evidence of facts and



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findings embodied therein; but it will be treated, at most, as prima facie evidence thereof. The parties will remain free to call, examine, and cross-examine witnesses as if the report had not been made. No incident of the jury trial is modified or taken away either by the preliminary, tentative hearing before the auditor or by the use to which his report may be put.

SMC states that it objected to the possession of a redacted version of the master's report by the jury, although it agreed that portions of the report could be read to the jury. SMC, Festo, and the Judge had previously agreed on the redacted (both sides call it "sanitized") version of the report. We observe that the subject matter remaining in the report related to the technology of the invention and the prior art, and the master's findings and recommendations on the issues of validity and infringement. The master's report favored SMC on the important question of infringement of the Stoll patent, although it favored Festo on the validity issues.

The court allowed the jurors to have a copy of the report, instead of merely reading it to them as stated in the Rule, in light of the complexity of the technologic facts. The copies were to be turned in prior to deliberations, and the jurors were so informed upon distribution of the report. However, apparently not all copies were turned in or collected prior to deliberations. SMC states that this tainted the entire procedure, and requires granting a new trial or setting aside or modifying the verdict.

The district court found that any procedural error was harmless and did not affect the substantial rights of either party. The district court referred to the following factors: (1) the jurors had notebooks to take notes on the master's report while they were reading it; (2) because various members of the jury finished reading the report on July 11, 12, and 13, the report was fresh in their minds during deliberations on July 14; (3) counsel for both sides commented on the findings in the report during their closing arguments; (4) the court gave clear instructions to the jury that they could give whatever weight they chose to the report and that they, not the special master, were the ultimate fact-finders; and (5) the verdict of the jury disregarded a key finding of the master's report with respect to the magnetizable sleeve, demonstrating that the jury did not actually give the master's report undue weight. Post-Trial Memorandum at 2 (July 26, 1994).

We do not deem the jury trial to have been fatally flawed. The technology was complex, the fine points of patent validity and infringement were complex, and the accounting evidence was complex. All were explained in the master's report, and during the argument reference was made by both parties to the master's findings and explanations. The master's report is evidence, and as such may be referred to in arguments of counsel. Fed. R. Civ. P. 53(e)(3); *Charles A. Wright, Inc. v. F.D. Rich Co.*, 354 F.2d 710, 714 (1st Cir.), cert. denied, 384 U.S. 960, 16 L. Ed. 2d 673, 86 S. Ct. 1586 (1966). There was testimony of witnesses on the points that had been discussed by the special master. Although the Court has cautioned that a special master must not replace a jury trial, *Dairy Queen, Inc. v. Wood*, 369 U.S. 469, 478 n.18, 133 U.S.P.Q. (BNA) 294, 297 n.18, 8 L. Ed. 2d 44, 82 S. Ct. 894 (1962); *La Buy*, 352 U.S. at 258, in this case a full jury trial was held.



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It is significant that the jury verdict did not track the master's Conclusions. Although SMC argues that the jury must have placed undue reliance on the master's Conclusions, SMC's counsel told the jury in closing argument:

Judge Saris will instruct you that you can give whatever weight you desire to this report. I would suggest to you that you give it the maximum weight. He especially considered this point. He was certainly very knowledgeable concerning everything that went on. He had an eleven-day trial before him and then he issued a detailed 68-page report in which he concluded that the SMC rodless cylinder did not infringe.

Despite this exhortation, the jury's Conclusion as to infringement of the Stoll patent was contrary to the master's Conclusion.

On the entirety of the circumstances, we do not believe that SMC's rights to a fair trial were affected by the lapse whereby the jury retained a copy of the master's report during its deliberations. Fed. R. Civ. P. 61 provides:

Rule 61. Harmless Error No error in either the admission or the exclusion of evidence and no error or defect in any ruling or order or in anything done or omitted by the court or by any of the parties is ground for granting a new trial or for setting aside a verdict or for vacating, modifying or otherwise disturbing a judgment or order, unless refusal to take such action appears to the court inconsistent with substantial Justice. The court at every stage of the proceeding must disregard any error or defect in the proceeding which does not affect the substantial rights of the parties.

We discern no ground for a new trial flowing from the procedures with respect to the special master.

III

DAMAGES

SMC disputes the damages assessed by the jury. The assessment of damages is a question of fact, and is decided by the jury when trial is to a jury. *Brooktree*, 977 F.2d at 1578, 24 U.S.P.Q.2D (BNA) at 1417; *Weinar v. Rollform, Inc.*, 744 F.2d 797, 808, 223 U.S.P.Q. (BNA) 369, 375 (Fed. Cir. 1984), cert. denied, 470 U.S. 1084, 85 L. Ed. 2d 143, 105 S. Ct. 1844 (1985). The jury's award must be upheld unless the amount is grossly excessive, clearly not supported by the evidence, or based on speculation or guesswork. *Brooktree*, 977 F.2d at 1580, 24 U.S.P.Q.2D (BNA) at 1419. To the extent that there were conflicts in the evidence with respect to damages, neither the trial court upon motion for judgment as a matter of law, nor the appellate court, may substitute its findings for those of the jury. *Id.* at 1581, 24 U.S.P.Q.2D (BNA) at 1419.

A. General Damages



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The general measure of the actual damages of a manufacturing patentee is the lost profits that the patentee would have earned but for the infringement. *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 377 U.S. 476, 507, 141 U.S.P.Q. (BNA) 681, 694, 12 L. Ed. 2d 457, 84 S. Ct. 1526 (1964); *Del Mar Avionics, Inc. v. Quinton Instrument Co.*, 836 F.2d 1320, 1326, 5 U.S.P.Q.2D (BNA) 1255, 1260 (Fed. Cir. 1987). Festo was a manufacturer of the patented product, and presented evidence on the factors of (1) demand for the product, (2) the possible substitution of other products, (3) Festo's manufacturing and marketing capability to fulfill the demand, and (4) the amount of profit Festo would have made on the sales lost due to the infringement. See *Panduit Corp. v. Stahlin Bros. Fibre Works, Inc.*, 575 F.2d 1152, 1156, 197 U.S.P.Q. (BNA) 726, 729-30 (6th Cir. 1978); *Gyromat Corp. v. Champion Spark Plug Co.*, 735 F.2d 549, 552, 222 U.S.P.Q. (BNA) 4, 6 (Fed. Cir. 1984). As discussed in *Rite-Hite Corp. v. Kelley Co.*, 56 F.3d 1538, 1545, 35 U.S.P.Q.2D (BNA) 1065, 1069 (Fed. Cir. 1995) (en banc), the Panduit factors are a useful (albeit not the only) mode of establishing damages in patent cases. In this case the evidence presented by Festo methodically tracked the Panduit factors.

Mr. Horst Saalbach, President of Festo, and Mr. Joachim Scholz, Vice President of Sales and Marketing of Festo, testified about the demand for magnetically coupled rodless cylinders because of their unique characteristics. Mr. Saalbach and Mr. Scholz testified that mechanical rodless cylinders, and band and cable cylinders, were not acceptable substitutes in the special applications in which magnetically coupled rodless cylinders are used. They provided evidence that Festo and SMC were the only suppliers during the period of infringement. Mr. Saalbach testified that Festo could have accommodated about eight to ten times more business in the rodless cylinder market.

SMC disputed the issue of substitution of other products. The parties also presented conflicting evidence and argument as to the relative prices at which SMC and Festo sold comparable products, and the effect of any price differential on a customer's choice of a non-infringing substitute. SMC relies on *BIC Leisure Prods. Inc. v. Windsurfing Int'l, Inc.*, 1 F.3d 1214, 27 U.S.P.Q.2D (BNA) 1671 (Fed. Cir. 1993); however, in *BIC* there were at least fourteen competing manufacturers, whereas in the case at bar Festo and SMC were the only manufacturers. When there is a two-supplier market occupied by the patentee and the infringer, it is reasonable for the jury to infer that the patentee would have made the infringer's sales, absent proof to the contrary. See *State Indus., Inc. v. Mor-Flo Indus., Inc.*, 883 F.2d 1573, 1578, 12 U.S.P.Q.2D (BNA) 1026, 1029 (Fed. Cir. 1989), cert. denied, 493 U.S. 1022 (1990). On the totality of the evidence, we conclude that a reasonable jury could have found that Festo's damages should be measured by its lost profits due to SMC's infringement.

Mr. Steven Skalak, a CPA from Coopers & Lybrand, provided a detailed analysis of Festo's lost profits, showing the calculations he performed to determine what Festo's profits would have been had there been no infringement by SMC. SMC disputes the measurement of such profits, arguing that Festo had a net loss for its early years, and Festo responding that these magnetic cylinders were profitable items. Festo states that SMC's accounting witness, Mr. Squire, did not provide an alternative lost profit analysis, or identify any items that should have been included in or excluded from the calculation of Festo's fixed costs. SMC does not disagree. Although SMC now appears to



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challenge all of Festo's evidence, it is apparent that there was substantial evidence at trial that could support the jury verdict.

B. Accessory Sales

SMC states that included in the damages award were lost sales of "accessory" items sold with the magnetically coupled rodless cylinders. In *Rite-Hite*, 56 F.3d at 1550, 35 U.S.P.Q.2D (BNA) at 1073 the court stated that "[we do not extend] liability to include items that have essentially no functional relationship to the patented invention and that may have been sold with an infringing device only as a matter of convenience or business advantage."

There was undisputed testimony that the items here at issue could be used only with the patented magnetic cylinders, and had no independent market or use. Mr. Saalbach testified that certain "accessories" are necessary to make the magnetically coupled rodless cylinder operational. Mr. Scholz testified that the accessories that Festo sells "you must have to get this device to do work." Mr. Skalak explained the study he performed to verify Festo's sales of these items with the patented rodless cylinders. Such items, having no market, use, or value separate from the patented cylinders, were properly included in the damages award.

The verdict of damages was supported by substantial evidence and in accordance with law, and must be sustained.

IV CONCLUSION

The district court's judgment is affirmed.

Costs are taxed in favor of Festo.

AFFIRMED

1. *Festo Corp. v. Shoketsu Kinzoku Kogyo Kabushiki Co.*, No. 88-1814-PBS (D. Mass. Feb. 3, 1994).

2. Claim 9. A device for moving articles, which comprises: a hollow cylinder formed of non-ferrous material and having opposite axial ends; a piston mounted in the interior of the hollow cylinder and reciprocatingly slidable therein, the piston including a central mounting member disposed axially in the cylinder, a plurality of cylindrically-shaped permanent magnets mounted on the central mounting member and spaced apart axially from each other, each magnet having a bore formed axially there-through for receiving the central mounting member, at least one pair of end members mounted on the central mounting member and disposed on opposite axial sides of the plurality of magnets, a pair of cushion members formed of resilient material, the cushion members being situated near opposite axial ends of the central mounting member to help prevent damage to the piston when the piston contacts an axial end of the cylinder, and a pair of resilient sealing rings situated near opposite axial ends of the central mounting member and engaging the cylinder to



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effect a fluid-tight seal therewith; a body mounted on the exterior of the hollow cylinder and reciprocatingly slidable thereon, the body including a plurality of annularly shaped permanent magnets surrounding the cylinder and spaced apart from each other, the permanent magnets of the piston and body being polarized so as to magnetically couple the body to the piston whereby movement of the piston inside the cylinder causes a corresponding movement of the body outside the cylinder, the body further including means provided thereon for holding on the body an article to be moved; and means for controlling the admission of pressure fluid into the cylinder and exhaust fluid from the cylinder for moving the piston in the cylinder, the attractive forces between the permanent magnets of the piston and the body being such that movement of the piston causes corresponding movement of the body below a predetermined load on the body and such that above said predetermined load movement of the piston does not cause corresponding movement of the body. [Paragraphing added.]

3. Claim 1. In an arrangement having a hollow cylindrical tube and driving and driven members movable thereon for conveying articles, the improvement comprising wherein said tube is made of a nonmagnetic material, wherein said driving member is a piston movably mounted on the inside of said tube, said piston having a piston body and plural axially spaced, first permanent annular magnets encircling said piston body, said piston further including first means spacing said first permanent magnets in said axial spaced relation, the radially peripheral surface of said magnets being oriented close to the internal wall surface of said tube, said piston further including plural guide ring means encircling said piston body and slidingly engaging said internal wall and first sealing rings located axially outside said guide rings for wiping said internal wall as said piston moves along said tube to thereby cause any impurities that may be present in said tube to be pushed along said tube so that said first annular magnets will be free of interference from said impurities, wherein said driven member includes a cylindrical sleeve made of a magnetizable material and encircles said tube, said sleeve having plural axially spaced second permanent annular magnets affixed thereto and in magnetically attracting relation to said first permanent annular magnets and second means spacing said second permanent annular magnets in said axially spaced relation, the radially inner surface of said magnets being oriented close to the external surface of said tube, said sleeve having end face means with second sealing rings located axially outside said second permanent annular magnets for wiping the external wall surface of said tube as said driven member is moved along said tube in response to a driving movement of said piston to thereby cause any impurities that may be present on said tube to be pushed along said tube so that second permanent annular magnets will be free of interference from said impurities. [Paragraphing added.]

