United States Court of Appeals for the Federal Circuit

04-1275, -1346

LISLE CORPORATION,

Plaintiff-Appellee,

v.

A.J. MANUFACTURING COMPANY,

Defendant-Appellant.

Jon O. Nelson, Banner & Witcoff, Ltd., of Chicago, Illinois, argued for plaintiff-appellee. With him on the brief were Matthew P. Becker and Phoebe K. Phillips.

Jonathan A. Harris, Wildman, Harrold, Allen & Dixon, of Chicago, Illinois, argued for defendant-appellant. With him on the brief was John S. Letchinger.

Appealed from: United States District Court for the Northern District of Illinois

Judge David H. Coar

United States Court of Appeals for the Federal Circuit

04-1275,-1346

LISLE CORPORATION,

Plaintiff-Appellee,

v.

A.J. MANUFACTURING COMPANY,

Defendant-Appellant.

DECIDED: February 11, 2005

Before LOURIE, Circuit Judge, FRIEDMAN, Senior Circuit Judge, and BRYSON, Circuit Judge.

LOURIE, Circuit Judge.

A.J. Manufacturing Company ("A.J.") appeals from the decision of the United States District Court for the Northern District of Illinois granting summary judgment of infringement of United States Patent 5,287,776 ("the '776 patent") in favor of Lisle Corporation ("Lisle") and denying A.J.'s motion for summary judgment of invalidity for indefiniteness and "impossibility." Lisle Corp. v. A.J. Mfg. Co., No. 02 C 7024 (N.D. Ill. Oct. 31, 2003) ("Summary Judgment"). A.J. also appeals from the district court's decision denying A.J.'s motion for judgment as a matter of law ("JMOL") after a jury found the '776 patent was not shown to be invalid for public use. We affirm.

BACKGROUND

The patent in this appeal relates to an inner tie rod tool. As shown below in figure 1, most automobiles today are equipped with a rack and pinion steering control

system. ’776 patent, col. 1, ll. 10-11. A component of the rack and pinion steering control system is the inner tie rods (16, 18). As the patent explains, “[s]ervicing of such a rack and pinion steering system often requires removal and replacement of the tie rods.” Id. at col. 1, ll. 17-19. Due to the location of the tie rods and the variety of nut shapes holding the tie rods in place, removal of that component can be tedious with prior art tools.

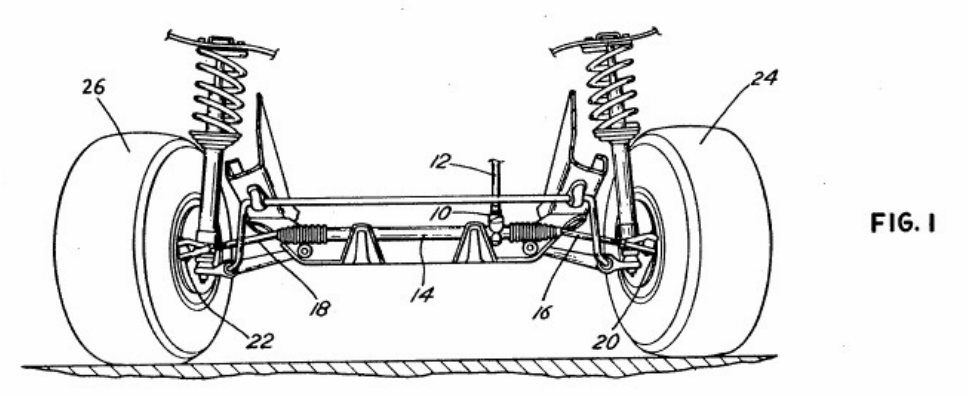


FIG. 1

The patented invention alleviates the need for automobile mechanics to completely dismantle steering control systems and keep multiple prior art tie rod tools for various inner tie rod designs. Id. at col. 1, ll. 36-40. Figure 7, shown below, illustrates the main features of the patented tool. The tool is composed of two distinct parts, a wrench disc (54) and a hollow tube (40). The wrench disc is C-shaped with arms for engaging the nut (56, 58) and tabs for securing the disc onto the hollow tube (60, 62). The hollow tube, which houses the tie rod to be removed, has an opening on one end for a ratchet wrench (41), two slots (43) where the tabs of the wrench disc fit, and a retainer ring (44) to secure the disc in place. The patented tool works by placing the wrench disc over the socket of the inner tie rod (shown in figure 7 below in hatched lines) and then encasing the tie rod inside the hollow body of the tool. The user of the tool can readily engage or disengage the wrench disc from the body of the tool by

rotating the retainer ring from an open position to a closed position and vice versa. Moreover, the patented tool accomplishes its objective of replacing multiple prior art tie rod tools by allowing a single tie rod tool to utilize wrench discs of varying dimensions and shapes.

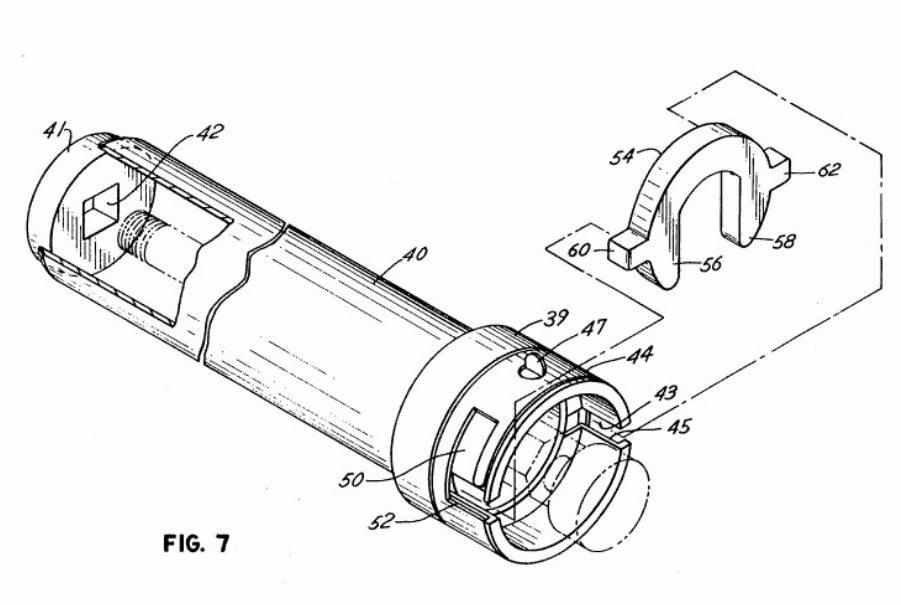


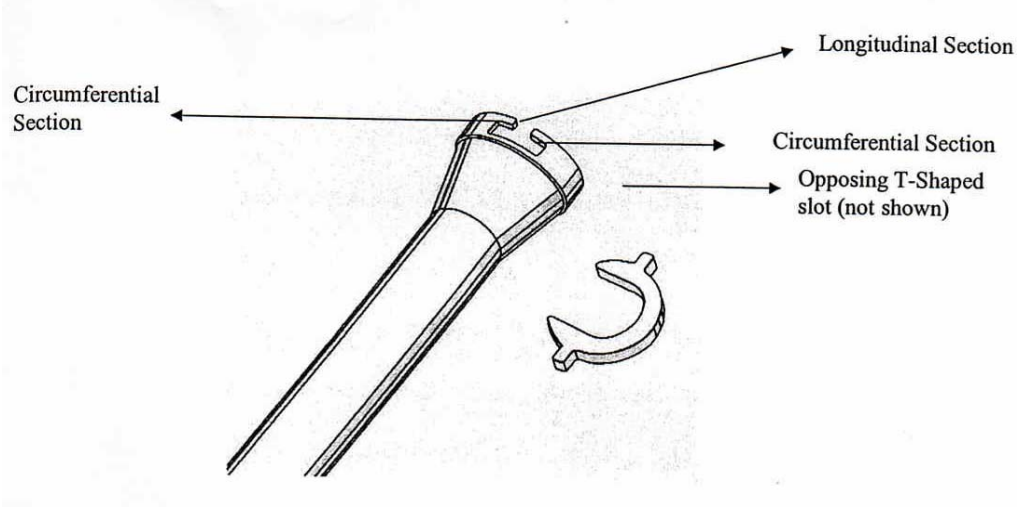
FIG. 7

Lisle and A.J., the parties to this dispute, are manufacturers and competitors in the field of automotive tools. Lisle owns the '776 patent, and on October 1, 2002, Lisle filed suit accusing A.J. of infringing the patent by manufacturing and selling its YA3000A tool. In its Answer, A.J. denied infringing the patent and asserted that the patent was invalid.

The YA3000A, shown below, is similar to the device of figure 7 of the '776 patent.[1] A noticeable difference between figure 7 and the YA3000A is that figure 7 has a separately-affixed rotatable ring (44) with L-shaped openings (50, 52) and two slots

[1] The following descriptions are for purposes of understanding the issues, but the question of infringement of course relates to the comparison of the accused tool to the claims, not to a specific figure of the patent.

(43), whereas the accused tool has two longitudinal sections spaced 180 degrees apart that open up to wider circumferential sections to form non-rotatable T-shaped openings.



A.J.'s YA3000A

As with figure 7, the YA3000A operates by having the user first place the wrench disc over the inner tie rod socket and then encase the inner tie rod with the hollow body of the tool. Unlike figure 7, the wrench disc and the hollow body of the YA3000A are securely engaged to one another by having the tabs of the wrench disc pass through the longitudinal sections into the circumferential sections and then rotating the tool.[2]

On June 19, 2003, after ordering the parties to submit their proposed construction of the claims at issue, the district court issued an opinion construing claim 1 of the '776 patent.[3] Lisle Corp. v. A.J. Mfg. Co., No. 02 C 7024 (N.D. Ill. June 19,

[2] As explained above, the tool shown in figure 7 of the '776 patent engages the wrench disc to the hollow body of the tool by rotating the retainer ring.

[3] Claim 1, the only independent claim asserted by Lisle, reads as follows:

> A tool for removal of inner tie rods comprising in combination:

2003). In that opinion, the court construed the claim limitation "retainer" to mean "any of various devices used for holding something." Id., slip op. at 8.

On October 31, 2003, prompted by A.J.'s motion for reconsideration and the parties' respective motions for summary judgment of infringement and noninfringement, the district court issued an opinion modifying its earlier construction of the claim limitation "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith." The court had difficulty with the apparent inconsistency caused by the juxtaposition of the words "detachably" and "cooperative," but ultimately construed that limitation to mean that "[r]otation of the retainer can result in separation or disengagement or it can result in rotation of the disc and a tie rod that is interlocked with the disc." Summary Judgment, slip op. at 23. The court also granted summary judgment in favor of Lisle that the YA3000A infringed the '776 patent. Finally, the court denied A.J.'s motion for summary judgment of invalidity for indefiniteness or "impossibility."

Subsequently, a jury trial was held on the single issue of whether the '776 patent was invalid on the ground of public use under 35 U.S.C. § 102(b). On February 12, 2004, the jury found the '776 patent was not shown to be invalid on the ground of public

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> (a) a nut engaging, C-shaped wrench disc having spaced arms for engaging a nut, and outwardly projecting tabs for cooperation with a retainer; and
>
> (b) a hollow tube for placement over a tie rod, said tube having a retainer at one end and at least two slots for cooperatively engaging the tabs of the wrench disc and means for cooperation with tube rotation means at the opposite end, said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith.

use. The district court denied A.J.'s motion for JMOL of invalidity of the '776 patent after the jury rendered its verdict.

A.J. timely appealed to this court. We have jurisdiction pursuant to 28 U.S.C. § 1295(a)(1).

DISCUSSION

We review a district court's grant of summary judgment de novo, reapplying the same standard used by the district court. Ethicon Endo-Surgery, Inc. v. U.S. Surgical Corp., 149 F.3d 1309, 1315 (Fed. Cir. 1998). Summary judgment is appropriate if there is no genuine issue as to any material fact and that the moving party is entitled to JMOL. Fed. R. Civ. P. 56(c). "The evidence of the non-movant is to be believed, and all justifiable inferences are to be drawn in his favor." Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 255 (1986).

When a party moves for JMOL in a case tried to a jury, we review de novo the district court's decision by reapplying the JMOL standard. Markman v. Westview Instruments, Inc., 52 F.3d 967, 975 (Fed. Cir. 1995) (en banc); Medcom Holding Co. v. Baxter Travenol Labs., Inc., 106 F.3d 1388, 1402 (7th Cir. 1997). We also review the legal standards that the jury applied in reaching its verdict to determine whether they were correct as a matter of law. Markman, 52 F.3d at 975; Medcom, 106 F.3d at 1402. When a legal issue is submitted to a jury without an objection, we treat the jury's verdict on the legal issue as a resolution of all genuinely disputed underlying factual issues in favor of the verdict winner. Mendenhall v. Cedarapids, Inc., 5 F.3d 1557, 1562 n.3 (Fed. Cir. 1993); Medcom, 106 F.3d at 1402. The jury's resolution of all factual disputes

is reviewed for substantial evidence. Markman, 52 F.3d at 975; Mojica v. Gannett Co., Inc., 7 F.3d 552, 561 (7th Cir. 1993).

Infringement of a utility patent requires a two-step analysis. "First, the court determines the scope and meaning of the patent claims asserted . . . [and secondly,] the properly construed claims are compared to the allegedly infringing device." Cybor Corp. v. FAS Techs., Inc., 138 F.3d 1448, 1454 (Fed. Cir. 1998) (en banc) (citations omitted). Step one, claim construction, is a question of law, Markman, 52 F.3d at 970-71, that we review de novo, Cybor, 138 F.3d at 1456. Step two, comparison of the claims to the accused device, requires a determination that every claim limitation or its equivalent be found in the accused device. Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 29 (1997). That determination is a question of fact. Bai v. L & L Wings Inc., 160 F.3d 1350, 1353 (Fed. Cir. 1998).

A patent is presumed to be valid. 35 U.S.C. § 282 (2000). Nonetheless, a patent can be found invalid if "the invention was in . . . public use . . . in this country more than one year prior to the date of the application for patent in the United States." 35 U.S.C. § 102(b). Experimental use negates patent invalidity for public use; when proved, it may show that particular acts do not constitute a public use within the meaning of § 102. Baxter Int'l, Inc. v. Cobe Labs., Inc., 88 F.3d 1054, 1059 (Fed. Cir. 1996). Although the determination of whether a patent is invalid for public use is a question of law that we review de novo, the disputed facts found to support that determination are reviewed for substantial evidence. Minn. Mining & Mfg. Co. v. Chemque, Inc., 303 F.3d 1294, 1301 (Fed. Cir. 2002).

I. Claim Construction and Infringement

On appeal, A.J. challenges the district court's summary judgment of infringement of the '776 patent, arguing mainly that the court erred in its construction of the claim limitations "retainer" and "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith." A.J. asserts that under the correct claim construction, its accused product does not meet either one of those limitations.

According to A.J., the district court erred by giving the term "retainer" its ordinary and accustomed meaning, arguing that the '776 patent specification repeatedly refers to a "retainer" as a rotatably-affixed collar or ring, and thus limits the scope of that claim term. A.J. asserts that the term "retainer" should have been construed to mean a "collar or ring rotatably affixed over the surface of the hollow tube." On the other hand, A.J. contends that the district court erred by not applying the ordinary and accustomed meaning to the limitation "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith." For that limitation, A.J. proposes the alternative construction that the "retainer and tabs work together to disengage to rotate the disc and a tie rod interlocked therewith," which it believes more accurately reflects the grammatical structure of the claim language.

We affirm the district court's construction of the term "retainer." There is no basis for limiting the scope of the term "retainer" to the rotatably-affixed retainer ring shown in figure 7 of the '776 patent, as advocated by A.J. An object of the patented invention is to provide a single tool that can be used on many different tie rod configurations, '776 patent, col. 1, ll. 56-68, and it is clear from the context of the patent that the retainer facilitates that objective by permitting the body of the tool to engage and disengage

wrench discs, e.g., id. at col. 3, l. 39-col. 4, l. 6. Tellingly, the patent does not place any significance on using a separately-affixed rotating-retainer component as shown in figure 7, but, instead, broadly states that the retainer's configuration and shape may be varied. E.g., id. at col. 4, ll. 8-9. Thus, we will not give the term "retainer" the narrower claim construction that A.J. proposes.

With respect to the claim limitation "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith," we will clarify the district court's claim construction. In its proposed claim construction, A.J. asserts a hyper-technical reading of the limitation that requires the wrench disc and the hollow tube to simultaneously detach from one another and rotate the tie rod. Obviously, that cannot be, since the tool disclosed by the patent is incapable of simultaneously detaching the wrench disc from the hollow tube and rotating a tie rod. We therefore reject A.J.'s proposed claim construction and instead rely on the patent specification to attain a common-sense meaning of that claim limitation.

As explained above, an object of the patented invention is to provide a single tool that can be used on many different tie rod configurations. Id. at col. 1, ll. 56-68. That objective, however, is only realized because the retainer allows the body of the tool to engage or disengage the wrench discs. Id. at col. 1, ll. 44-50. Moreover, figure 7 of the '776 patent illustrates that although the wrench disc is detachable, only when it is secured onto the body of the tool can it perform its stated function of rotating the tie rod. Given this disclosure, the meaning of the disputed claim limitation becomes apparent: the wrench disc is detachable from the body of the tool, but when not detached, the tabs

of the wrench disc and the retainer work together to rotate the wrench disc and the tie rod that is interlocked with the wrench disc.

Notwithstanding our minor clarification of the limitation "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith," we will affirm the court's summary judgment of literal infringement of the claims. Indeed, A.J. did not even assert a noninfringement argument in relation to the limitations "retainer" and "said retainer being detachably cooperative with the tabs to rotate the disk and a tie rod engaged therewith," in the event that we affirm the district court's claim construction. A.J.'s noninfringement positions regarding those two limitations were premised solely on this court adopting its proposed claim construction and we have declined that invitation.

In the alternative, A.J. asserts that even if we were to sustain the district court's claim construction, the accused product still does not infringe the '776 patent because it does not meet the "at least two slots for cooperatively engaging the tabs of the wrench disc" limitation. The district court previously construed the claim limitation "cooperatively engaging" to mean "working together to interlock." Summary Judgment, slip op. at 18. A.J. does not dispute the district court's construction of that claim limitation. A.J. contends, however, that its product does not meet the "cooperatively engaging" limitation because the wrench disc is not in the locked position while the tabs of the wrench disc are still in the longitudinal sections of the T-shaped slots.

Applying the district court's construction of the claim limitation "cooperatively engaging," we agree with the district court that there was no genuine issue of material fact that A.J.'s product meets that limitation. In A.J.'s product, only by passing through

the two longitudinal sections of the T-shaped slots can the wrench disc enter the body of the tool and become "interlocked." Thus, the two longitudinal sections are indisputably "working together" with the other structural elements of A.J.'s product "to interlock" the wrench disc. There is no basis for A.J.'s contention that the wrench disc interlocking process must occur while the disc tabs are in the longitudinal section of the T-shaped slots, nor will we impose such a limitation.

II. Invalidity

A.J. also appeals from the denial of its motion for JMOL of invalidity of the '776 patent on the ground of public use and requests that we overturn a jury verdict concluding otherwise. The undisputed facts are that sometime in May 1989 Lisle became interested in developing an improved tie rod tool. The early prototype tool was similar to A.J.'s product, and Lisle does not dispute that the prototype tool would have fallen within the scope of the claims of the '776 patent. It is established law that that which infringes, if later, anticipates if earlier. Lewmar Marine, Inc. v. Barient, Inc., 827 F.2d 744, 747 (Fed. Cir. 1987). However, on or about December 12, 1989, Lisle delivered the prototype tool to four different automobile repair shops in Omaha, Nebraska. Lisle did not receive any payment for those tools. Upon distributing the tool, Lisle also did not require any of the mechanics to enter into a formal confidentiality agreement. On June 26, 1992, over thirty months after the first prototype tool was delivered, Lisle filed the application leading to the '776 patent.

A.J. asserts that based on the substantial evidence it presented at trial, the district court should have set aside as a matter of law the jury's verdict that the '776 patent was not shown to be invalid for public use. A.J.'s primary argument for reversing

the jury's verdict is that Lisle failed to demonstrate the requisite level of control over the work of the mechanics with the prototype tool to support an experimental use defense. To support its position, A.J. cites the lack of a formal confidentiality agreement, the lack of restrictions placed on the use of the prototype tool by the mechanics, and the absence of any documentary evidence regarding the actual testing of the prototype tool. A.J. also contends that the district court erred by providing a jury instruction with an erroneous standard for rebutting a prima facie case of invalidity for public use. Based on that purported legal error, A.J. seeks a new trial on the issue of invalidity for public use.

We affirm the district court's denial of A.J.'s motion for JMOL of invalidity. The parties accept that, were the deliveries of the prototype tools to the automobile repair shops not to constitute experimental use, they would be evidence of public use. After all, the mechanics were members of the relevant public. However, substantial evidence supports the jury's findings of fact in favor of Lisle on the question of experimental use, and those findings support the conclusion of lack of public use. To counter A.J.'s attempt to show public use, Lisle relies on the testimony of Mr. Danny Williams, coinventor of the '776 patent and an engineer for Lisle, which was presented to the jury. Williams testified that he needed to know how well the wrench disc would fit on the inner tie rod socket and whether the prototype tool would fit in the confined location of the tie rod in different automobile models. Williams also stated that, under company protocol, he and other engineers at Lisle would have contacted the mechanics who were given the prototype tool every two to four weeks by telephone or in person to receive testing feedback. Williams further testified that he modified the design of the retainer in the

prototype tool and added additional wrench disc sizes based on comments he received from the outside mechanics. Finally, Williams explained that although there was no formal confidentiality agreement between Lisle and the mechanics who were given the prototype tools, Lisle had prior working relationships with those mechanics. Williams also believed that the mechanics knew that the prototype tool was given to them for experimental purposes.

The jury was also presented with "General Meeting Reports" that were drafted by the president of Lisle, Mr. John Lisle. The reports gave updates on the then-current status of the tie rod tool project, plans for future testing, concerns regarding the commercial viability of the tools, and suggestions from outside mechanics regarding how to improve the design of the tool. Mr. Marvin Negley, Manager of Engineering at Lisle, also testified that those reports were based on information that Mr. Lisle received during weekly management meetings. While we express no view as to whether we as fact-finders might have concluded that this evidence was sufficient to rebut a prima facie case of public use, we agree with Lisle that the submitted testimony and reports do constitute substantial evidence from which a reasonable jury could find that Lisle rebutted the prima facie case of public use and thus A.J. failed to prove by facts supported by clear and convincing evidence that the '776 patent was invalid for public use.

Relying upon TP Laboratories, Inc. v. Professional Positioners, Inc., 724 F.2d 965, 971 (Fed. Cir. 1984), A.J. also assigns legal error to the jury instruction because it did not require Lisle to produce "convincing evidence" of experimental use. Instead, the jury instruction only required Lisle to come forward with "evidence" of experimental use.

According to A.J., the jury instruction "was tantamount to an instruction that virtually any evidence of experimental use would suffice to negate prima facie public use."

We reject A.J.'s request for a new trial because of an allegedly improper jury instruction. "We review the adequacy of the jury instructions for prejudicial legal error," and we find none here. Mendenhall, 5 F.3d at 1563 (citations omitted). On numerous occasions, this court has recognized that a party challenging a patent's validity has the burden of proving by clear and convincing evidence that the patent is invalid, and that that burden does not shift at any time to the patent owner. E.g., TP Labs., 724 F.2d at 971. Nonetheless, if the challenging party presents a prima facie case of public use, the patentee must come forward with "convincing evidence" of experimental use to counter that showing. Id. (stating that "the challenger [does not have] the burden of proving that the use is experimental"). In other words, the patentee must simply produce sufficient rebuttal evidence to prevent the party challenging the patent's validity from meeting its burden of proving by clear and convincing evidence that the invention was in public use. "Convincing" evidence can meet that need. We hasten to note, however, that the statement in TP Laboratories regarding "convincing evidence" cited by A.J. did not set forth a new legal standard regarding the burden of production for patentees to rebut a prima facie case of public use, nor did it impose a burden of production comparable to the clear and convincing evidence required to invalidate a patent.[4]

[4] We also do not fault the trial court for denying A.J.'s request to insert the phrase "convincing evidence" into the jury instruction. It was not unreasonable for the court to believe that a jury would have been confused by an instruction referencing both the clear and convincing burden of proof for patent invalidity and the patentee's burden of producing "convincing evidence" to rebut a prima facie case of public use.

Applying these standards, we conclude that although the district court might have specified in the jury instruction that the patentee needed to provide sufficient evidence to rebut the prima facie case of public use, its failure to do so was harmless. For the same reasons that we affirm the district court's denial of A.J.'s motion for JMOL, we conclude that "convincing evidence" was presented whereby a reasonable jury could have found that A.J.'s prima facie case of public use was rebutted.

Finally, A.J. appeals from the denial of its summary judgment motion for invalidity of the '776 patent on the §§ 101 and 112 grounds of indefiniteness and "impossibility." Lisle requests that we decline to consider A.J.'s appeal of that denial because A.J. allegedly waived its indefiniteness and "impossibility" defenses in the Final Pretrial Order. We agree that A.J. waived those defenses and we will not consider their merits. As stated above, the district court denied A.J.'s motion for summary judgment of invalidity of the '776 patent on the grounds of indefiniteness and "impossibility." A.J., however, did not further pursue those defenses at trial, nor did it ask the trial court to dismiss those defenses with prejudice. Instead, it pursued the public use defense and, in the Final Pretrial Order, merely reserved the right to appeal the §§ 101 and 112 defenses contingent on this court's adopting A.J.'s proposed construction of the "detachably cooperative" limitation. For the reasons set forth above, we have rejected A.J.'s proposed construction and its public use defense, and thus we conclude that A.J. waived its indefiniteness and "impossibility" defenses.

CONCLUSION

We affirm the district court's decision granting summary judgment of infringement of the '776 patent. We further affirm the court's denial of A.J.'s motion for JMOL to

reverse the jury's verdict that A.J. failed to prove the '776 patent was invalid. Finally, we conclude that A.J. has waived its defense of invalidity of the '776 patent on the grounds of indefiniteness and "impossibility," and thus we will not consider the merits of the district court's denial of A.J.'s motion for summary judgment on those grounds.

AFFIRMED.