

NOTE: This disposition is nonprecedential.

**United States Court of Appeals  
for the Federal Circuit**

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**CIMLINE, INC.,**  
*Plaintiff-Appellant,*

v.

**CRAFICO, INC.,**  
*Defendant-Appellee.*

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2010-1348

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Appeal from the United States District Court for the District of Minnesota in case no. 07-CV-3997, Judge Richard H. Kyle.

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Decided: March 2, 2011

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PAUL R. SMITH, Foley & Mansfield, PLLP, of Minneapolis, Minnesota, argued for plaintiff-appellant. With him on the brief was LAURIS A. HEYERDAHL.

CASEY A. KNISER, Patterson Thunte Christensen Pedersen, P.A., of Minneapolis, Minnesota, argued for defendant-appellee. With him on the brief was ERIC H. CHADWICK.

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Before RADER, *Chief Judge*, GAJARSA and PROST, *Circuit Judges*.

PROST, *Circuit Judge*.

Plaintiff-Appellant Cimline, Inc. (“Cimline”) appeals the district court’s dismissal of its complaint seeking, inter alia, a declaration of invalidity or noninfringement of U.S. Patent No. 5,967,375 (“’375 patent”) and the court’s sua sponte entry of summary judgment in favor of Defendant-Appellee CrafcO, Inc. (“CrafcO”) on its counterclaim for infringement. *Cimline, Inc. v. CrafcO, Inc.*, 672 F. Supp. 2d 916 (D. Minn. 2009). Thereafter, the parties stipulated to \$25,000 in damages for infringement of the ’375 patent and the district court entered an injunction against Cimline. We *affirm-in-part, vacate-in-part* and *reverse-in-part* the district court’s judgment because the ’375 patent is invalid.

#### BACKGROUND

Cimline and CrafcO are competitors in the market for the manufacture and sale of sealant melters. Sealant melters are heavy machinery equipment that are often trailered and used to heat and melt blocks of sealant. The melted sealant is poured into cracks in roadway surfaces to seal them and prevent further deterioration of the roadway. Early sealant melters did not include conveyor belts. Thus, heavy sealant blocks were hoisted to the top of the sealant melter box and dropped into a reservoir tank, sometimes called the “kettle.” This manual task posed some danger to the operator, since the sealant blocks are heavy and can cause hot sealant to splash back

onto the operator when dropped into the kettle. Hot sealant can cause serious burns.

In the mid-1990s, employees of the Pennsylvania Department of Transportation (“PennDOT”) sought a better way to load sealant blocks into the melter. PennDOT made modifications to sealant melters purchased from CrafcO. Specifically, PennDOT added a manual conveyor belt attached to a splash box affixed at the top of the kettle. Propelled by gravity, sealant blocks would travel down the manual conveyor belt and drop through a hinged door at the top of the splash box. The hinged door would prevent hot sealant from splashing back when the sealant block was dropped into the kettle. Because sealant blocks traveled down the manual conveyor belt under the force of gravity, only one block at a time could be loaded onto the conveyor belt.

CrafcO sent an employee to PennDOT to observe the modifications to its machine. Thereafter, CrafcO sent a letter to PennDOT warning it that CrafcO would not honor the warranty on modified sealant melters and that CrafcO could not be held liable for injuries resulting from use of the modified melters. Later, CrafcO attended a sales meeting with PennDOT and PennDOT requested that CrafcO make a sealant melter similar to the modified melters, but having a powered conveyor belt that could drop sealant blocks through a splash box. CrafcO agreed and assigned the redesign project to a new employee, Mr. David Barnes. Ultimately, Mr. Barnes, the named inventor, delivered a redesigned sealant melter satisfying PennDOT’s requirements and CrafcO filed a patent application on this redesign, which matured into the ’375 patent.

Though the extent of Mr. Barnes's knowledge of the scope of the prior art at the time of invention is in dispute, the actual scope of the prior art is not. First, CrafcO sold sealant melters without conveyor belts or splash boxes in the 1990s. Those sealant melters were modified by PennDOT to add manual conveyor belts and splash boxes. The record evidence shows, however, that CrafcO built and delivered sealant melters to the Texas Department of Transportation in the 1980s. Those sealant melters included both a manual conveyor belt and a splash box. It is unclear why CrafcO sold sealant melters without a conveyor belt and a splash box to PennDOT in the 1990s when it had previously sold sealant melters with a conveyor belt and a splash box in the 1980s. It is undisputed, however, that sealant melters using a manual conveyor belt and a splash box were in the prior art since at least the 1980s.

The '375 patent issued on October 19, 1999, with twenty-three claims. CrafcO asserts three dependent claims: claims 4, 5, and 23. Claims 4 and 5 depend from claim 1, which requires:

A sealant melter, comprising:

(A) mobile frame;

(B) heated sealant tank mounted on said frame, said sealant tank having a liquid sealant discharge opening and an upper sealant block inlet opening;

(C) a splash box disposed above said inlet opening of said sealant tank, said splash box having an upper splash box inlet and having a lower splash

box outlet disposed above said inlet opening of said sealant tank; and

(D) a sealant block conveyor which conveys sealant blocks from a source to said splash box inlet, said sealant block conveyor having 1) a discharge end positioned adjacent said splash box inlet and 2) an inlet end; and wherein said inlet end of said sealant block conveyor is vertically adjustable relative to said frame.

Claim 4 adds the requirement that the “sealant block conveyor is a powered conveyor” and claim 5 adds a requirement to the sealant melter of claim 4, wherein the device includes a control assembly mounted at the inlet end of the sealant block conveyor. J.A. 73. Claim 23 depends from independent claim 21, which includes additional limitations on the dimensions of the splash box and a requirement that the splash guard close before the sealant block enters the pool of melted sealant in the kettle. Figure 1, shown below, includes a depiction of an exemplary embodiment of a sealant melter being towed by a vehicle.

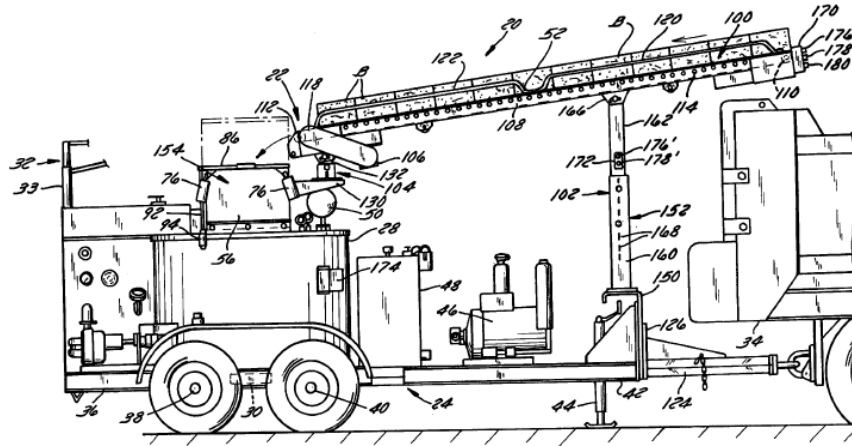


FIG. 1

In 2000, CrafcO offered to sell its patented device to Cimline. Cimline did not respond. Several years later, Cimline offered to rent its new sealant melters to PennDOT. CrafcO advised Cimline that the Cimline sealant melters copied CrafcO's patented technology. Cimline then built a sealant melter that it thought designed around the '375 patent. CrafcO, however, continued to assert that Cimline's redesign infringed the '375 patent. Thus, Cimline filed suit against CrafcO seeking, inter alia, a declaration that the '375 patent is invalid, or alternatively—if the '375 patent is valid—a declaration that Cimline's sealant melter does not infringe.

Upon CrafcO's motion for summary judgment on the counts alleged in Cimline's complaint, the district court dismissed Cimline's invalidity count noting that "Cimline has not satisfied its burden of creating a genuine issue of fact concerning invalidity" under 35 U.S.C. §§ 102(b) and 103(a). *Cimline*, 672 F. Supp. 2d at 927. The district court sua sponte granted summary judgment to CrafcO on infringement of the '375 patent under the doctrine of equivalents by Cimline's sealant melter. *Id.* at n.16. The

district court dismissed all claims of the complaint with prejudice and entered an injunction against Cimline. Cimline appealed and we have jurisdiction under 28 U.S.C. § 1295(a)(1).

#### DISCUSSION

We review a district court's grant of summary judgment de novo. *Revolution Eyewear, Inc. v. Aspex Eyewear, Inc.*, 563 F.3d 1358, 1365 (Fed. Cir. 2009). Summary judgment is appropriate where there is no genuine issue of material fact and the moving party is entitled to judgment as a matter of law. Fed. R. Civ. P. 56(c); *AquaTex Indus., Inc. v. Techniche Solutions*, 419 F.3d 1374, 1379 (Fed. Cir. 2005). Thus, summary judgment may be granted when no "reasonable jury could return a verdict for the nonmoving party." *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 248 (1986).

A court of appeals, in the absence of a formal counterclaim or cross-motion requesting relief, may nonetheless enter judgment in favor of the non-moving party when there are no material issues of fact in dispute and the parties have had the opportunity to argue all relevant issues. See *First Nat'l Bank v. Md. Cas. Co.*, 290 F.2d 246 (2d Cir. 1961), *cert. denied*, 368 U.S. 939 (1961); *Procter & Gamble Indep. Union v. Procter & Gamble Mfg. Co.*, 312 F.2d 181 (2d Cir. 1962), *cert. denied*, 374 U.S. 830 (1963); see, e.g., *UMC Elecs. Co. v. United States*, 816 F.2d 647, 657 (Fed. Cir. 1987), *cert. denied*, 484 U.S. 1025 (1988) (when facts are undisputed and issue is solely one of law, appellate court need not remand but may resolve issue); *Genentech, Inc. v. Novo Nordisk A/S*, 108 F.3d 1361, 1368 (Fed. Cir. 1997) (invalidating patent for failure to meet the enablement requirement when the parties' arguments had been fully vetted); see also *Campaign for Family*

*Farms v. Glickman*, 200 F.3d 1180, 1186-87 (8th Cir. 2000); 28 U.S.C. § 2106 (“The Supreme Court or any other court of appellate jurisdiction may affirm, modify, vacate, set aside or reverse any judgment, decree, or order of a court lawfully brought before it for review, and may remand the cause and direct the entry of such appropriate judgment, decree, or order, or require such further proceedings to be had as may be just under the circumstances.”); 10A Charles Alan Wright, Arthur R. Miller & Mary Kay Kane, *Federal Practice and Procedure* §§ 2716, 2720 (3d ed. 1998).

“Obviousness is a question of law based on underlying findings of fact.” *In re Kubin*, 561 F.3d 1351, 1355 (Fed. Cir. 2009). A patent is invalid for obviousness “if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.” 35 U.S.C. § 103(a). The underlying factual inquiries are (1) the scope and content of the prior art, (2) the differences between the prior art and the claims at issue, (3) the level of ordinary skill in the art, and (4) any relevant secondary considerations, such as commercial success, long felt but unsolved needs, and the failure of others. *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007) (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966)).

## I

The district court determined that Cimline failed to offer sufficient evidence of obviousness necessary to satisfy its burden of demonstrating a genuine issue of material fact to survive summary judgment. In particular, the district court noted that Cimline did “little more



than point to the products CrafcO sold in the 1980s and PennDOT's modifications and then assert, in a conclusory fashion, that the '375 patent must have been obvious in light of those products." *Cimline*, 672 F. Supp. 2d at 925. Though the issue of obviousness was scantily briefed to the district court, the parties' oral argument to this court focused primarily on the obviousness issue, with the parties agreeing that there are no material issues regarding the underlying factual inquiries on the legal determination of obviousness. *See, e.g.*, Oral Argument at 4:27-48, *available at* <http://oralarguments.cafc.uscourts.gov/Audiomp3/2010-1348.MP3>. We agree that there are no genuine issues of fact regarding the underlying factual inquiries of the obviousness analysis and address each factor in turn.

The scope and content of the prior art and the differences between the prior art and the claims at issue are not in dispute. The prior art includes sealant melters built by CrafcO in the 1980s and sold to the Texas Department of Transportation. Those sealant melters included splash boxes and manual conveyor belts. Likewise, the sealant melters modified by PennDOT in the mid-1990s included splash boxes and manual conveyor belts. The prior art also includes powered conveyor belts like those used in the mining industry. Mr. Barnes, the named inventor of the '375 patent, testified that powered conveyor belts existed for perhaps as many as seventy-five years. When compared to the prior art, the asserted claims of the '375 patent differ in only one way: the use of a powered conveyor controlled by a switch. Though CrafcO asserts that the splash box limitations of claim 23 also differentiate its invention from the prior art, the testimony of inventor Barnes indicates that the splash box of the PennDOT sealant melter was the same as the splash box of the '375 patent.

There is no dispute regarding the level of ordinary skill in the art. Further, the parties do not dispute any evidence regarding secondary considerations. For instance, at oral argument, Cimline was questioned regarding the existence of factors such as long felt need and the delay in combining powered conveyor belts with sealant melters. Oral Argument at 5:28-7:00. CrafcO, however, offered no response to Cimline's answers. Thus, no issue of fact exists regarding the underlying factual inquiries of the obviousness analysis.

Cimline argues that the '375 patent is obvious because it discloses an invention that is merely the combination of prior art sealant melters—having manual conveyor belts and splash guards—with powered conveyor belts. Citing the report of its expert, Cimline argues that powered conveyor belts were in the prior art since at least the 1980s and for at least seventy-five years, according to the inventor of the '375 patent. Cimline contends that CrafcO's combination of prior art sealant melters with a powered conveyor belt yielded nothing “more than the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417. Also, Cimline argues that the district court incorrectly suggested that “the focus instead must be on whether there exists ‘a reason that would have prompted a person of ordinary skill in the relevant field to combine’ a powered conveyor with a sealant melter.” *Id.* at 418; Appellant Br. at 38. Cimline further asserts that the district court erred in failing to apply common sense to determine that the combination of prior art sealant melters with powered conveyor belts is obvious.

CrafcO responds that the district court correctly determined that Cimline offered “almost no evidence to support its allegations of obviousness.” Appellee Br. at 8.

Crafco asserts that the conclusory opinions of Cimline’s expert failed to create any genuine issue of fact regarding obviousness and the district court was correct to discredit this evidence. *See Innogenetics N.V. v. Abbott Labs.*, 512 F.3d 1363, 1373-74 (Fed. Cir. 2008). Specifically, Crafco asserts that although powered conveyors were in the prior art, the prior use of these conveyors did not address the safety aspects addressed by the ’375 patent. According to Crafco, the use of the powered conveyor belt in the ’375 patent improves the safety of the sealant melter by allowing sealant blocks to be lined up end-to-end while the operator drops them one-by-one into the melter, thereby avoiding harmful burns from hot sealant splashing back on the operator.

## II

As a preliminary matter, we find fault with the district court’s reliance on pre-*KSR* decisions and its focus on whether there existed explicit teachings as to “a reason that would have prompted a person of ordinary skill in the relevant field to combine” a powered conveyor with a sealant melter. *Cimline*, 672 F. Supp. 2d at 926. The Supreme Court set forth a flexible inquiry in *KSR*, which allows for a court “to take account of ‘the inferences and creative steps,’ or even routine steps, that an inventor would employ.” *Ball Aerosol & Spec. Container v. Ltd. Brands*, 555 F.3d 984, 993 (Fed. Cir. 2009). When taking these inferences and creative or routine steps into account, it may be proper to conclude that the result of a “combination [of prior art] would have been entirely predictable and grounded in common sense” under the proper set of facts. *Id.*

Our cases which have relied on “common sense” consistently teach that “factfinders may use common sense in

addition to record evidence” to determine the legal issue of obviousness. *Perfect Web Tech., Inc. v. InfoUSA, Inc.*, 587 F.3d 1324, 1329 (Fed. Cir. 2009); *see also Wyers v. Master Lock Co.*, 616 F.3d 1231, 1239 (Fed. Cir. 2010); *Ball Aerosol*, 555 F.3d at 993. In bridging the gap between prior art references and a conclusion of obviousness, the factfinder may rely on the prior art references themselves, the knowledge of those of ordinary skill in the art, the nature of the problem to be solved, market forces, design incentives, the “interrelated teachings of multiple patents,” “any need or problem known in the field of endeavor at the time of invention and addressed by the patent,” or the background knowledge, creativity, and common sense of the person of ordinary skill. *KSR*, 550 U.S. at 418–21; *see also Ruiz v. A.B. Chance Co.*, 234 F.3d 654, 665 (Fed. Cir. 2000). While we note that the district court was without the benefit of our opinions in *Perfect Web* and *Wyers* at the time of its opinion,<sup>1</sup> these cases on “common sense” derive from the Supreme Court’s direction in *KSR* and we apply the law as it stands today.

The ’375 patent discloses a sealant melter having a powered conveyor and a splash guard box. As compared to the prior art, the ’375 patent differs only in that the prior art used a manual, gravity-propelled conveyor belt. The improvement achieved by the modification disclosed in the ’375 patent in using a powered conveyor belt, rather than a manual conveyor belt, is that multiple blocks of sealant could be placed end-to-end on a conveyor belt. The operator could then cause single blocks of sealant to drop into the melter one-by-one by toggling a

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<sup>1</sup> Our opinion in *Perfect Web* issued on the same day that Judge Kyle issued his opinion, *Cimline*, 672 F. Supp. 2d at 916. Our opinion in *Wyers* followed later.

remote switch, as needed, to complete a roadway maintenance project.

The combination of prior art sealant melters having a manual conveyor belt with a powered conveyor belt requires nothing more than common sense to appreciate the resultant advantage. The claimed invention of the '375 patent represents no more than “the predictable use of prior art elements according to their established functions.” *KSR*, 550 U.S. at 417. Further, it is clear that a person of ordinary skill would have perceived a reasonable expectation of success in the combination of these two elements of the prior art. See *In re O'Farrell*, 853 F.2d 894, 904 (Fed. Cir. 1988) (“For obviousness under § 103, all that is required is a reasonable expectation of success.”). None of Crafcó's arguments to the contrary are convincing. The teachings of “common sense” in this case derive not only from the nature of the problem to be solved, but also from market forces themselves. As to the nature of the problem to be solved, the record evidence shows that it is common sense that an object, such as coal, can travel along a powered conveyor and will stop when the power to the conveyor is turned off. J.A. 384-86. As to market forces, these are clearly evidenced by the sales meeting and production request that PennDOT made of Crafcó after Crafcó witnessed PennDOT's modifications to early Crafcó sealant melters.

Crafcó's argument that the district court correctly found a lack of evidence as to obviousness and properly discounted the evidentiary value of Cimline's expert report is likewise unavailing. The obviousness analysis may “include recourse [by the factfinder] to logic, judgment, and common sense available to the person of ordinary skill that do[es] not necessarily require explication in any reference or expert opinion.” *Perfect Web*, 587 F.3d

at 1329. By extension, expert reports—even credible experts reports—are not required when the underlying factual considerations are resolved by resort to common sense. Here, the technology is easily understandable, even without the assistance of expert opinion. *Centricut, LLC v. Esab Group, Inc.*, 390 F.3d 1361, 1369 (Fed. Cir. 2004). Thus, the district court erred in concluding that a lack of evidence existed as to the underlying factual considerations of the obviousness analysis. *Cimline*, 672 F. Supp. 2d at 926-27. The court further erred in applying the heightened burden placed on expert reports opining as to obviousness by *Innogenetics*. 512 F.3d at 1363 (requiring a heightened burden of explanation in an expert report regarding motivation to combine references for a technology involving the detection and classification of hepatitis C genotypes in a biological sample). Our cases distinguish the need for and breadth of required expert disclosure when the underlying technology is “easily understandable.” *Compare Perfect Web*, 587 F.3d at 1329-30 *with Innogenetics*, 512 F.3d at 1363.

While unnecessary in an obviousness analysis where the factual inquiries are resolved by application of common sense, *Perfect Web*, 587 F.3d at 1329, we note that Cimline’s submitted expert report in this case acknowledges that conveyors are nothing new in the industry and powering a conveyor is something that has been done in the past and is not technically difficult to accomplish. We agree. The automation of mechanical equipment once operated manually is commonplace and reasonably obvious to one of ordinary skill. *See, e.g., Leapfrog Enters. v. Fisher-Price, Inc.*, 485 F.3d 1157, 1161 (Fed. Cir. 2007) (“Accommodating a prior art mechanical device . . . to modern electronics would have been reasonably obvious to one of ordinary skill . . . .” and “has been commonplace in

recent years.”). This evidence fully supports our conclusion that the ’375 patent is invalid for obviousness.

#### CONCLUSION

This case presents the rare procedural occurrence in which the Appellant, Cimline, failed to file a cross-motion for summary judgment in response to CrafcO’s motion for summary judgment. The parties have had an opportunity to be fully heard, however, and there are no disputed issues of material fact regarding obviousness. Thus, the legal determination of obviousness is amenable to complete adjudication upon appellate review and we exercise our authority and discretion to decide this case in the interest of judicial economy. *See Brown v. J.B. Hunt Transp. Servs., Inc.*, 586 F.3d 1079, 1088 n.6 (8th Cir. 2009) (disposing of appellant’s claims on appellate review despite appellant’s failure to file a cross-motion for summary judgment, where the facts were undisputed); 28 U.S.C. § 2106.

We conclude that it is a matter of common sense to combine a prior art sealant melter with a powered conveyor to create the sealant melter claimed in the ’375 patent. The intended results achieved by this combination would be perceived as having a reasonable expectation of success to a person of ordinary skill. Therefore, the district court’s dismissal with prejudice of Cimline’s invalidity and noninfringement counts in its Amended Complaint is vacated. The district court’s entry of stipulated damages and an injunction against Cimline is also vacated. The court’s grant of summary judgment in favor of CrafcO on validity and infringement is reversed. We affirm-in-part the district court’s summary determination as to Cimline’s antitrust and unfair competition claims. Judgment is entered in favor of Cimline on its invalidity

and noninfringement counts because we hold that the '375 patent is invalid.

**AFFIRMED-IN-PART, VACATED-IN-PART,  
REVERSED-IN-PART**