United States Court of Appeals,

Fifth Circuit.

No. 95-10850.

DSC COMMUNICATIONS CORPORATION, Plaintiff-Appellant,

v.

DGI TECHNOLOGIES, INC., Defendant-Appellee.

April 30, 1996.

Appeals from the United States District Court for the Northern District of Texas.

Before REYNALDO G. GARZA, WIENER and STEWART, Circuit Judges.

REYNALDO G. GARZA, Circuit Judge:

DSC Communications Corporation obtained a preliminary injunction enjoining DGI Technologies, Inc. from making removable copies of DSC Communication Corporation's copyrighted software. DSC Communications Corporation appeals from the granting of this preliminary injunction, arguing that it is too narrowly drawn. Because we hold that the district court did not abuse its discretion in crafting the injunction, we AFFIRM.

I.

FACTS

DSC Communications Corporation ("DSC") manufactures telephone switching systems ("phone switches"). DGI Technologies, Inc. ("DGI") manufactures various devices, including microprocessor cards, that are used in DSC phone switches. DSC sued DGI for unfair competition on various grounds, including copyright infringement. DSC obtained a preliminary injunction in that suit, which prohibits DGI from making copies of DSC's copyrighted

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operating system software that can be removed from DSC's customer's premises. The injunction, however, does not prohibit DGI from making copies of DSC's copyrighted software that cannot be removed from DSC's customer's premises. DSC's appeals from the preliminary injunction, arguing that DGI should also be enjoined from making copies that cannot be removed from DSC's customer's premises.

A phone switch routes long distance telephone calls to their destinations. It consists of three principal components: (1) the switch matrix, which actually routes the telephone calls; (2) the trunk/line interface system, which converts long distance telephone signals into a form and sequence that can be handled by the switch matrix; and (3) a mass storage frame, which contains the software that operates the entire switching system.

Long distance signals must be in digital form and properly sequenced before they can be routed through the switch matrix. The trunk/line interface system converts the data arriving from the long distance telephone line into proper digital form and sequence. The trunk/line interface system is controlled by DSC's copyrighted software when it converts these signals. Once these signals have been "switched"—i.e. routed to their destination—the trunk/line system converts them back into a form in which they can be transmitted through the phone lines to their destination.

The trunk/line interface system is housed in metal cabinets called frames. These frames contain a number of shelves. The front of the shelves is open, and at the back of the shelves is a backpane. Cables carrying incoming telephone signals from the

telephone line and outgoing signals to the switch matrix and the telephone lines are attached to the backpane. Groups of printed circuit boards called cards are inserted into the shelves of the frames from the front and connect to the backpane. These cards contain the components that translate the data from the telephone line into a format that can be used by the switch matrix and vice versa.

The principal cards in the frames are microprocessor cards. The microprocessor cards contain firmware, which is software embedded in a memory chip on the card. When a microprocessor card is inserted into the frame, it must boot up. That is, it must download DSC's copyrighted operating system software into its random access memory ("RAM"). The booting up process is similar to that used in personal computers, which also boot up by downloading operating system software from a floppy disk or hard disk when the computer is turned on or reset. A microprocessor card must download DSC's copyrighted operating system software when it is used in the phone switch.

DSC manufactures the entire phone switch system, and has a copyright on the software used in the phone switch. DSC sells phone switches, but does not sell the software necessary to operate them. Instead, it licenses the software to its customers. One of the customers to whom DSC sold a phone switch and licensed its software is NTS Communications Corporation ("NTS"). The licensing agreement between DSC and NTS prohibits NTS from copying the software, and only allows NTS to use the software in conjunction

with the phone switch purchased from DSC.

DGI is attempting to develop a microprocessor card that can be used in DSC phone switches. Customers would use this card instead of using a DSC-manufactured card. DSC contends that DGI engaged in several acts of copyright infringement in its attempt to develop a microprocessor card. The alleged infringement at issue in this appeal is DGI's copying of DSC's copyrighted operating system software.

Because DSC did not sell its operating system software on the open market, the only way to gain access to the software was to license it from DSC. DGI needed to gain access to DSC's operating system software in order to develop a microprocessor card, because the microprocessor card had to be able to download the software into RAM, and had to be compatible with the software. To obtain access to the operating system software, DGI obtained access to a DSC phone switch owned by NTS. NTS gave DGI permission to use its phone switch to test microprocessor cards. In return for this permission, DGI gave NTS a ten percent discount on purchases of DGI cards, shelves and frames. DGI did more than merely test its cards, however. Without NTS's knowledge, it made copies of DSC's copyrighted software, and removed these copies from NTS's premises.

DGI used two methods to copy DSC's copyrighted software. First, it downloaded DSC's operating system into the memory of a DSC microprocessor card, out through a port on that card, and into a lap top computer. Second, DGI modified a DSC microprocessor card by adding chips designed to capture the communications between the

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card and another microprocessor card from which the operating system software would be obtained and a chip designed to hold and retain information on the downloading function when the microprocessor card was removed. DGI copied DSC's copyrighted operating system software using this modified microprocessor card.

DSC and DGI were already involved in litigation at the time that DGI was copying DSC's operating system software. DSC sued DGI for allegedly misappropriating its trade secrets to develop microprocessor cards for use is DSC's phone switch and for violating the Lanham Act in selling its cards. DGI countersued, alleging that DSC violated antitrust laws, misappropriated DGI's trade secrets, engaged in unfair competition and committed tortious interference with DGI's business relationships. When DSC learned that DGI was copying its operating system software, it amended its complaint to allege copyright infringement, and moved for a preliminary injunction to prevent DGI from continuing to copy, and benefitting from copying, the operating system software. The district court granted a preliminary injunction, prohibiting DGI from making any copies of DSC's operating system software that could be removed from NTS's premises. However, the injunction did not prohibit DGI from "downloading into dynamic RAM on a microprocessor or test microprocessor card which is incidental to the testing or operating of a compatible [microprocessor] card so long as the copy is not capable of being removed from the customer location and transported to any other location." In other words, DGI could not continue to make copies of the operating system to

take back to its lab and study, but it could test its microprocessor card on NTS's phone switch, even though DSC's operating system software would be downloaded into the microprocessor card's RAM.

II.

DISCUSSION

A.

STANDARD OF REVIEW

The decision to grant or deny a preliminary injunction lies within the discretion of the district court and will be reversed on appeal only upon a showing of abuse of discretion. *Blue Bell Bio-Medical v. Cin-Bad, Inc.,* 864 F.2d 1253, 1256 (5th Cir.1989).

B.

ANALYSIS

In order to obtain a preliminary injunction, DSC was required to demonstrate: (1) a substantial likelihood of success on the merits; (2) a substantial threat of irreparable injury if the injunction is not issued; (3) that the threatened injury to DSC outweighs any damage the injunction might cause to DGI; and (4) that the injunction will not disserve the public interest. *Plains Cotton Co-op. Ass'n v. Goodpasture Computer Serv., Inc.,* 807 F.2d 1256, 1259 (5th Cir.), *cert. denied,* 484 U.S. 821, 108 S.Ct. 80, 98 L.Ed.2d 42 (1987). Because we hold that the district court did not abuse its discretion in implicitly[1] finding that DSC did not have

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[1]The district court's order did not address the issue of whether DGI violated DSC's copyright when making non-removable copies of the operating system software. It simply found that

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a substantial likelihood of success on the merits, we affirm the injunction.

DSC claims that it has a substantial likelihood of prevailing on its claim that DGI infringes upon its copyright every time DGI boots up one of its microprocessor cards on a DSC phone switch. When a DGI microprocessor card boots up, DSC's copyrighted operating system software is downloaded into the card's RAM. DSC contends that this downloading constitutes making a copy under copyright law. Therefore, DSC argues, booting up a DGI microprocessor card infringes upon DSC's copyright by making an unauthorized copy of DSC's copyrighted operating system software.

To prevail on its claim of copyright infringement, DSC will have to prove: (1) that it owned a copyright on the operating system software; and (2) that DGI impermissibly copied or otherwise infringed upon that copyright. *Plains Cotton Co-op.,* 807 F.2d at 1260. Further, it will have to overcome DGI's affirmative defenses, including the defense of copyright misuse.

The parties agree that DSC owns a copyright on the operating system software. However, they disagree on whether booting up a DGI microprocessor card constitutes impermissible copying. DSC argues that an impermissible copy is made every time software is loaded onto a computer's RAM. *See MAI Sys. Corp. v. Peak Computer,*

DGI violated DSC's copyright when it made removable copies of the software. Because the district court refused to enjoin DGI from making non-removable copies of DSC's software "incidental to the testing or operating of a compatible [microprocessor] card," we treat the district court's order as implicitly holding that DGI was not entitled to an preliminary injunction prohibiting such copying.

Inc., 991 F.2d 511, 518 (9th Cir.1993), *cert. dism'd, --- U.S. ----*, 114 S.Ct. 671, 126 L.Ed.2d 640 (1994). Because the licensing agreement between DSC and NTS only allows the software to be booted up on DSC equipment, this copying is not authorized. Therefore, DSC argues, booting up a microprocessor card violates its copyright. DGI does not dispute that a copy is made when the microprocessor cards are booted up. Instead, DGI argues, *inter alia,* that it is entitled to the defense of copyright misuse.

The district court did not err in implicitly finding that DSC did not have a substantial likelihood of prevailing on the merits because DGI may well prevail on its affirmative defense of copyright misuse. The defense of copyright misuse "bars a culpable plaintiff from prevailing on an action for the infringement of the misused copyright." *Lasercomb Am., Inc. v. Reynolds,* 911 F.2d 970, 972 (4th Cir.1990). *See Mitchell Bros. Film Group v. Cinema Adult Theater,* 604 F.2d 852, 865 n. 27 (5th Cir.1979), *cert. denied,* 445 U.S. 917, 100 S.Ct. 1277, 63 L.Ed.2d 601 (1980) (recognizing the copyright misuse defense). The defense is a recognition that while "copyright law [seeks] to increase the store of human knowledge and arts by awarding ... authors with the exclusive rights to their works for a limited time ... the granted monopoly power does not extend to property not covered by the ... copyright." *Lasercomb,* 911 F.2d at 976.

The copyright misuse defense is analogous to the patent misuse defense. *Id.* The patent misuse defense was recognized by the Supreme Court in *Morton Salt Co. v. G.S. Suppiger,* 314 U.S. 488, 62

S.Ct. 402, 86 L.Ed. 363 (1942). In that case, the plaintiff Morton Salt brought suit on the basis that the defendant had infringed upon Morton's patent in a salt-depositing machine. The salt tablets that the machine deposited were not themselves a patented item, but Morton's patent license required that licensees use only salt tablets produced by Morton. Morton was thereby using its patent to restrain competition in the sale of an item that was not within the scope of the patent's privilege. The Supreme Court held that, as a court of equity, it would not aid Morton in protecting its patent when Morton was using that patent in a manner contrary to public policy.

In *Lasercomb,* the Fourth Circuit extended the rationale behind *Morton Salt* to copyright misuse. Paraphrasing *Morton Salt,* the Fourth Circuit stated:

> The grant to the author of the special privilege of a copyright carries out a public policy adopted by the Constitution and laws of the United States, "to promote the Progress of Science and useful arts, by securing for limited Times to [Authors] ... the exclusive Right ..." to their "original" works. United States Constitution, Art. I, § 8, cl. 8, 17 U.S.C. § 102. But the public policy which includes original works within the granted monopoly excludes from it all that is not embraced in the original expression. It equally forbids the use of the copyright to secure an exclusive right or limited monopoly not granted by the Copyright Office and which is contrary to public policy to grant.

Lasercomb, 911 F.2d at 977. We concur with the Fourth Circuit's characterization of the copyright misuse defense.

DGI may well prevail on the defense of copyright misuse, because DSC seems to be attempting to use its copyright to obtain a patent-like monopoly over unpatented microprocessor cards. Any

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competing microprocessor card developed for use on DSC phone switches must be compatible with DSC's copyrighted operating system software. In order to ensure that its card is compatible, a competitor such as DGI must test the card on a DSC phone switch. Such a test necessarily involves making a copy of DSC's copyrighted operating system, which copy is downloaded into the card's memory when the card is booted up. If DSC is allowed to prevent such copying, then it can prevent anyone from developing a competing microprocessor card, even though it has not patented the card. The defense of copyright misuse "forbids the use of the copyright to secure an exclusive right or limited monopoly not granted by the Copyright Office," including a limited monopoly over microprocessor cards. *See Lasercomb,* 911 F.2d at 977. Therefore, DGI's asserting the misuse defense could cast substantial doubt on the predictability of success by DSC.

Of course, we do not hold that DGI will successfully avail itself of the copyright misuse defense. After a trial on the merits, the district court may well decide that DSC did not commit copyright misuse, or that DGI cannot avail itself of the defense because it has "unclean hands." We simply hold that the district court did not abuse its discretion in implicitly holding that DSC did not have a substantial likelihood of success on the merits because—based on the evidence before the district court—DGI may prevail on its misuse to the defense.

III.

CONCLUSION

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Because we hold that the district court did not abuse its discretion in crafting the preliminary injunction, we AFFIRM.

AFFIRMED.