

United States District Court,
S.D. New York.

SCHINDLER ELEVATOR CORPORATION and Inventio AG,
Plaintiffs.

v.

OTIS ELEVATOR COMPANY,
Defendant.

No. 06-CV-05377 (CM)(THK)

Nov. 17, 2008.

Background: Patentee brought infringement action against competitor, alleging violation of patent for elevator installation system with destination dispatching. Cross-motions for summary judgment were filed.

Holding: The District Court, McMahon, J., held that competitor's system did not infringe patent.

Plaintiff's motion denied, defendant's motion granted.

5,689,094. Not Infringed.

Charles Richard Bruton, Buchanan Ingersoll, P.C., Philadelphia, PA, George Aloysius Hovanec, Jr., Patrick Christopher Keane, Martin Alexander Bruehs, Buchanan Ingersoll & Rooney PC, Alexandria, VA, Leslie Jill Harris, Buchanan Ingersoll & Rooney PC, New York, NY, for Plaintiffs.

Alan E. Littmann, Mark Leslie Levine, Sean W. Gallagher, Andrew Carter Baak, Elizabeth Leigh Thompson, Bartlit Beck Herman Palenchar & Scott LLP, Chicago, IL, James Kenneth Leader, S. Alyssa Young, Leader & Berkon LLP, New York, NY, Sundeep K. Addy, Bartlit Beck Herman Palenchar & Scott, Denver, CO, for Defendant.

DECISION AND ORDER DENYING PLAINTIFFS' MOTION FOR SUMMARY JUDGMENT OF INFRINGEMENT AND GRANTING DEFENDANT'S MOTION FOR SUMMARY JUDGMENT OF NONINFRINGEMENT

McMAHON, J.:

On July 17, 2006, plaintiffs Schindler Elevator Corporation ("Schindler") and Inventio AG ("Inventio") commenced this action, alleging that defendant Otis Elevator Company's ("Otis") "Compass with Seamless Entry" system, as installed at 7 World Trade Center ("7WTC"), directly infringes all claims of U.S. Patent

No. 5,689,094 (the "'094 Patent"). (Cl. para. 5.)

The Court construed the claims of the '094 Patent in its April 4, 2008 Markman Decision. *Schindler Elevator Corp. v. Otis Elevator Co.*, 561 F.Supp.2d 352 (S.D.N.Y.2008). The parties now cross-move for summary judgment on the issue of infringement.

For the reasons stated below, I find that as a matter of law, no reasonable jury could conclude that the "Compass with Seamless Entry" system infringes the '094 Patent. Therefore, Otis's motion for summary judgment is granted and Schindler and Inventio's motion for summary judgment is denied.

I. The '094 Patent

The '094 Patent describes an elevator installation with destination dispatching. In a conventional elevator system, passengers press an "up" or "down" button in the elevator lobby, enter the car, and designate the floor they wish to visit using buttons in the elevator car. *Schindler*, 561 F.Supp.2d at 355. In a destination dispatching system, by contrast, passengers specify their desired floor in the lobby before entering the elevator. *Id.*

The inventors of the '094 Patent do not claim to have invented destination dispatching. *Id.* Rather, the '094 Patent relates to a specific type of destination dispatching system, in which the passenger's desired destination is "communicated automatically to the elevator control ... without any personal action being required by the passenger." *Id.* (*quoting* '094 Patent, 2:50-54).

According to the '094 Patent, earlier methods of destination dispatching were "impractical" because they required the transmitting device, which was used to send the passenger's desired floor to the elevator control mechanism, to be "taken in hand." *Id.* (*quoting* '094 Patent, 1:38-42). Unlike these earlier methods, the '094 Patent teaches a destination dispatching system in which the passenger's desired floor is entered using an "information transmitter" that is carried on the passenger and a "recognition device" that is "mounted in the access area in the vicinity of the elevators." *Id.* (*quoting* '094 Patent, 6:12-14, 6:24-25, 8:3-4). The information transmitter is "actuated" when it comes within range of the recognition device. *Id.* (*citing* '094 Patent, 3:34-37, 6:24-27, 8:5-7). It then transmits the information required to make an elevator call to the recognition device, which in turn sends the information to a "control device." *Id.* (*citing* '094 Patent, Abstract, 6:31-36, 8:5-7). The control device then uses an algorithm to "allocat[e] an elevator to respond to the elevator call." '094 Patent, 6:17-19.

The information transmitter is pre-programmed with destination information so the system can operate "without any personal action being required by the passenger." *Schindler*, 561 F.Supp.2d at 355 (*quoting* '094 Patent, 2:53-54). With the destination dispatching system described by the '094 Patent, "[t]he entire operation of the call entry takes place hands-free, contactless and independent of the orientation of [the] information transmitter [], which also means that [the] information transmitter [] need not be visible for the identification thereof by [the] recognition device." *Id.* at 356 (*quoting* '094 Patent, 4:27-31).

II. Otis's "Compass with Seamless Entry" Elevator System

Plaintiffs allege that Otis's "Compass with Seamless Entry" destination dispatching system, which is installed at 7WTC, directly infringes all claims of the '094 Patent. The following facts about Otis's elevator system are undisputed.

To place an elevator call at 7WTC, regular passengers (as opposed to guests) must bring their building-issued or employer-issued RFID proximity card within the effective range of a card reader that is embedded in a security turnstile. (Pl. R. 56.1 Stmt. para. 9, 11; Pl. Resp. R. 56.1 Stmt. para. 8.) The security turnstiles at 7WTC are 37.5 inches high, and the card readers are located approximately 1 inch below the glass surface at the top of the turnstiles. (Def. R. 56.1 Stmt. para. 9-10.) The "typical maximum read range" for the card readers is 2.5 to 4.5 inches from the card readers (or 1.5 to 3.5 inches above the glass surface). (Pl. Resp. R. 56.1 Stmt. para. 11; *see also* Littmann Aff. Ex. 6 ("Dowling Dep.") at 93:6-19.)

When a passenger's RFID card is brought within the effective range of a card reader at 7WTC, the card reader reads the unique identification number that is contained as data on the RFID card and transfers it to the security database. (Def. R. 56.1 Stmt. para. 14-15.) The security database uses the identification number to look up passenger data, including default floor destination information. (*Id.* para. 16.) The security database then sends the passenger data to the Destination Entry Computer ("DEC"), which is located within the turnstile at the end opposite the card reader. (*Id.* para. 17.)

The DEC interprets the passenger data, parses the floor destination information, and sends a destination request to the elevator dispatcher. (*Id.* para. 18.) The elevator dispatcher uses an algorithm to decide which elevator should be assigned to the passenger. (*Id.* para. 19.) The elevator assignment is then sent to a visual display device in the turnstile, so that the passenger knows which elevator to proceed to. (*Id.* para. 20.) Passengers who wish to change their destination floor after going through the turnstile may do so using keypads that are mounted on the walls between the elevators, or by going to the security desk located near the turnstiles. (Pl. Resp. R. 56.1 Stmt. para. 21.)

The 7WTC lobby has two sets of security turnstiles at which a passenger can place an elevator call, and five elevator banks with a total of twenty-nine elevators. (Def. R. 56.1 Stmt. para. 3-5; Littmann Aff., Ex. 7.) As both plaintiffs and defendant state in their briefs, the turnstiles serve all of the elevator banks, and the different elevator banks serve different floors. (Pl. Opp. Mem. at 10; Def. Reply Mem. at 5.) The shortest distance between any turnstile and any elevator bank is approximately 54 feet, and the largest distance between any turnstile and any elevator bank is approximately 138 feet. (Def. R. 56.1 Stmt. para. 6; Pl. Mem., Ex. 25 ("Fortune Decl.") para. 5.)

In their Response to Otis's Rule 56.1 Statement, plaintiffs state that they disagree that the turnstiles are located 54 to 138 feet from the elevators. (Pl. Resp. R. 56.1 Stmt. para. 6.) According to plaintiffs, "After passing through the turnstiles, the passenger walks approximately 54 feet to reach the elevators. The distance between different elevators is approximately 84 feet (138 feet minus 54 feet)." (*Id.*) In support of this statement, plaintiffs cite the Supplemental Declaration of their expert, James Fortune. But while Mr. Fortune states that "the elevators are approximately 54 feet from the turnstiles," he also acknowledges that "the additional distance between the closest and farthest elevators [is] (approximately 84 feet)." (Pl. Opp. Mem., Ex. 9 ("Fortune Supp. Decl.") para. 6-7.) There is thus no difference between what defendant says and what Mr. Fortune says—a fact underscored by Mr. Fortune's original Declaration, wherein he agreed with Otis's approximation of the distances:

I have been advised by Plaintiffs' counsel that Dr. Daniel Van Der Weide, an expert witness for Otis, stated in a report dated May 11, 2007, that the card readers at 7WTC are located in the turnstiles in the lobby of the building, which are approximately 54 to 138 feet from the elevators. *I have personally visited 7WTC, and I consider those approximate distances to be accurate.*

(Fortune Decl. para. 5 (emphasis added).) Plaintiffs also provide the court with the floor plan of the lobby at 7WTC (Littmann Aff., Ex. 7), which, like Mr. Fortune, confirms the fact that the various elevator banks are not all 54 feet from the turnstiles.

Since the materials cited by plaintiffs do not support their assertion that the distances from the card readers to the elevators are in dispute, the Court is disregarding that assertion. *See Holtz v. Rockefeller & Co.*, 258 F.3d 62, 74 (2d Cir.2001) ("[D]istrict courts in the Southern ... District[] of New York have interpreted current Local Rule 56.1 to provide that ... where the cited materials do not support the factual assertions in the Statements, the Court is free to disregard the assertion.") (citations and internal quotations omitted). Thus, the approximate distances from the card readers to the elevators-54 to 138 feet-are not actually in dispute, and plaintiffs' characterization of the distance as "no more than 54 feet" in their brief is incorrect. (Pl. Reply Mem. at 4.)

III. Discussion

Summary judgment is appropriate if the evidence offered shows that there is "no genuine issue as to any material fact" and the moving party is entitled to judgment as a matter of law. Fed.R.Civ.P. 56(c); *Celotex Corp. v. Catrett*, 477 U.S. 317, 322-23, 106 S.Ct. 2548, 91 L.Ed.2d 265 (1986). In deciding a motion for summary judgment, the Court must view the record in the light most favorable to the party opposing the motion and draw all reasonable inferences in its favor. *See United States v. Diebold, Inc.*, 369 U.S. 654, 655, 82 S.Ct. 993, 8 L.Ed.2d 176 (1962); *Donahue v. Windsor Locks Bd. of Fire Comm'rs*, 834 F.2d 54, 57 (2d Cir.1987).

A. Direct Infringement

[1] [2] The determination of infringement is a two-step process. First, the Court construes the claims to determine their scope and meaning. The Court completed this step in its *Markman* Decision. *Schindler*, 561 F.Supp.2d at 352. Next, the construed claims are compared to the allegedly infringing device to determine whether every claim limitation, or its equivalent, is found in the accused device. *Cybor Corp. v. FAS Techs., Inc.*, 138 F.3d 1448, 1454 (Fed.Cir.1998) (en banc) (citation omitted); *Roche Palo Alto LLC v. Apotex, Inc.*, 531 F.3d 1372, 1377 (Fed.Cir.2008). This second step presents a question of fact. *Warner-Lambert Co. v. Purepac Pharm. Co.* (*In re Gabapentin Patent Litig.*), 503 F.3d 1254, 1259 (Fed.Cir.2007). However, "Summary judgment on the issue of infringement is proper when no reasonable jury could find that every limitation recited in a properly construed claim either is or is not found in the accused device either literally or under the doctrine of equivalents." *PC Connector Solutions LLC v. SmartDisk Corp.*, 406 F.3d 1359, 1364 (Fed.Cir.2005) (citation omitted). FN1

FN1. In a patent case it is always possible that the district court has not properly construed one or more claim terms. However, *Markman* decisions are not immediately appealable, so I can only assume that I correctly construed the claims.

[3] "Literal infringement requires that each and every claim limitation be present in the accused product." *Abraxis Bioscience, Inc. v. Mayne Pharma (USA) Inc.*, 467 F.3d 1370, 1378 (Fed.Cir.2006). If even one claim limitation is missing, there is no literal infringement. *MicroStrategy Inc. v. Bus. Objects, S.A.*, 429 F.3d 1344, 1352 (Fed.Cir.2005).

[4] [5] [6] If a device does not literally infringe, it may nonetheless be found to infringe under the doctrine

of equivalents, if the differences between the claimed invention and the accused device are insubstantial. *Stumbo v. Eastman Outdoors, Inc.*, 508 F.3d 1358, 1364 (Fed.Cir.2007) (*citing* *Graver Tank & Mfg. Co. v. Linde Air Prods. Co.*, 339 U.S. 605, 608, 70 S.Ct. 854, 94 L.Ed. 1097 (1950)). Plaintiffs do not raise any arguments under, or present any evidence on, the doctrine of equivalents. As the Federal Circuit noted in *Lear Siegler, Inc. v. Sealy Mattress Co.*, 873 F.2d 1422 (Fed.Cir.1989), "The party asserting infringement must present *evidence* and *argument* concerning the doctrine and *each* of its *elements*. The evidence and argument on the doctrine of equivalents cannot merely be subsumed in plaintiff's case of literal infringement." *Id.* at 1425 (citations and internal quotations omitted). Having failed to present evidence of equivalence or to make any argument based on the doctrine, plaintiffs are foreclosed from invoking the substantive application of the doctrine of equivalents. *See* *PC Connector*, 406 F.3d at 1364.

[7] Schindler and Inventio argue that Otis's "Compass with Seamless Entry" system contains each and every claim limitation of all claims of the '094 Patent. Otis contends that its "Compass with Seamless Entry" system does not infringe any claim of the '094 Patent because it is missing three claim limitations of independent claims 1 and 14: (1) the elevator system does not contain an "information transmitter" or a "recognition device;" (2) the card readers are not located "in the vicinity of the elevators;" and (3) the storage device is not "coupled between" a recognition device and a control device. I conclude that Otis is correct on contention (1) and is entitled to summary judgment in its favor. Because it is not necessary to reach contentions (2) or (3), I decline to do so—especially since reaching the issue raised by contention (3) would require a reopening of the *Markman* phase so a new dispute about the meaning of a claim term could be resolved. FN2

FN2. The term "control device" does not appear on the parties' Joint Claim Construction Statement and the Court was not asked to define the term in its *Markman* Decision. Nonetheless, the parties now dispute its meaning. I gather that the dispute has arisen because plaintiffs have changed their theory of infringement in light of the Court's *Markman* Decision. Originally, plaintiffs argued that the DEC was part of the "recognition device." (Pl. Mem., Ex. 18 ("Dowling Expert Report"), App. A., at 1, 5; Dowling Dep. at 145:5-8.) Now plaintiffs argue that the DEC is part of the "control device." (Dowling Supp. Decl. para. 14.) Plaintiffs' expert made this change after the Court issued its *Markman* Decision.

(1) Otis's "Compass with Seamless Entry" System Does Not Contain a "Recognition Device"

Independent claims 1 and 14 of the '094 Patent require "a recognition device for recognizing elevator calls entered at an entry location by an information transmitter carried by an elevator user." '094 Patent, 6:12-14, 7:5-7. In its *Markman* Decision, this Court construed "information transmitter" to mean "a device that communicates with a recognition device via electromagnetic waves, after being actuated by that recognition device, *without requiring any sort of personal action by the passenger.*" *Schindler*, 561 F.Supp.2d at 362 (emphasis added). "Recognition device" was defined as "a device that actuates and reads data transmitted by an information transmitter *without requiring any sort of personal action by the passenger.*" *Id.* (emphasis added).

The Court did not specify the "particular kind of 'personal action' that would be 'required by the passenger' to make the patent work, because 'any sort' of personal action must be unnecessary." *Id.* I further explained that:

The Court's definition of the terms rules out, not just standing in front of the recognition device, or inputting

data into the information transmitter by hand, but any and all types of personal action by the passenger. All the passenger need do is come within the area that is monitored by the recognition device (also referred to as the effective range of the recognition device); at that point, his transmitter will be activated automatically, and an elevator that has been programmed to take him to his default floor will be called.

Id.

The need for a lack of personal action (other than walking into the monitored area) is a critical part of the definition of "recognition device" because the inventors of the '094 Patent specifically disclaimed the need for any personal action when applying for the patent. The applicants originally claimed destination dispatching systems that use a wide range of information transmitters and recognition devices. When the PTO rejected those claims, the applicants amended them, limiting the claims to systems that operate "automatically" and allow "truly hands-free" operation by the elevator passenger. Id. at 360-61. The applicants distinguished their invention from the prior art by representing that their claims were limited to systems in which the communication between the information transmitter and recognition device takes place "automatically, contactlessly, and independently of the orientation of the information transmitter." Id. at 360 (internal quotations omitted). They further explained that the claims were limited to systems in which "it is not necessary that the information transmitter be in the elevator user's hands." Id. (internal quotations omitted).

According to plaintiffs, Otis's elevator system at 7WTC contains both an "information transmitter" and a "recognition device;" the RFID cards are "information transmitters" and the card readers located in the security turnstiles are "recognition devices." (Littmann Aff., Ex. 15 ("Pl. Interrog. Resp.") at 6-7.) Otis, on the other hand, argues that its system contains neither information transmitters nor recognition devices-at least not as defined in the '094 Patent-because in the "Compass with Seamless Entry" system, personal action is required to bring the RFID cards within the effective range of the card readers. I agree with Otis.

The maximum read range of the card readers installed at 7WTC is 2.5 to 4.5 inches. Since the card readers are embedded 1 inch below a glass surface at the top of the security turnstiles, the "effective range" of the card readers is within approximately 3.5 inches from the glass surface. Schindler "does not dispute that the range of the card reader in the accused system is limited." (Pl. Reply Mem. at 2 (internal quotations omitted).)

Because the effective range of the card readers at 7WTC is "limited" (extremely so), passengers must do something to bring their RFID card within that range. Passengers cannot simply "come within the area that is monitored by the recognition device" in order to activate their RFID card, because the area monitored by the card reader (the alleged recognition device) is located directly above a glass plate embedded in a 37.5 inch-high security turnstile. Schindler, 561 F.Supp.2d at 362. Passengers must not only walk by the area monitored by the alleged recognition device (i.e., walk through the security turnstile), they must also do something to place their card within 3.5 inches of that glass surface on top of the turnstile. They might have to take the card out of their pocket or handbag and hold it over the glass surface. Or they might be able to leave the card in their bag or wallet, as long as they place the bag or wallet within 3.5 inches of the glass surface. If passengers wear the card on a chain around their neck, they would have to lean down so that the card is no more than 3.5 inches from the card reader. In any event, the passengers must do something in order to bring the card (not just themselves) to a point at which the device embedded in the turnstiles can read it.

In support of their argument that Otis's elevator system contains a "recognition device," plaintiffs cite the observations and experiment recited in the Supplemental Declaration of their expert, Dr. Dowling. Dr. Dowling states that based on his personal observations and experiment during his visit to 7WTC, "it is not required for an elevator passenger have [sic] their card in hand, because, for example, they can leave it in the bottom of their purse or handbag as they walk through the turnstile." (PL Opp. Mem., Ex. 5 ("Dowling Supp. Decl.") para. 34.) Thus, according to Dr. Dowling, a card reader at 7WTC functions as a "recognition device" because it "actuates and reads data transmitted by the access card without requiring any sort of personal action by the passenger." (*Id.* para. 3.)

[8] Otis argues that under Fed.R.Civ.P. 37(c)(1), Dr. Dowling's observations and experiment should not be considered, because Dr. Dowling's Supplemental Declaration was not submitted until July 18, 2008 (in response to Otis's motion for summary judgment), after the close of discovery on May 31, 2007. Rule 37(c)(1) provides:

If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or is harmless.

Fed.R.Civ.P. 37(c)(1).

Dr. Dowling was deposed on May 17, 2007. At that time, he had never been to 7WTC. (*See* Dowling Supp. Decl. para. 29.) He offered various opinions based on his review of the '094 Patent and a marketing video provided by Otis showing passengers use the card readers installed at 7WTC. (*See* Dowling Expert Report at 4-5.) Dr. Dowling finally visited 7WTC on May 22, 2007, five days after he testified. (*Id.* para. 30.) While there, he made observations, and even conducted an experiment, that form the basis for his opinion that the "Compass with Seamless Entry" system contains a "recognition device." However, plaintiffs failed to give Otis notice of Dr. Dowling's observations and experiment, "either by supplementing Dr. Dowling's report pursuant to Rule 26(e)(2) or by other means." (Def. Reply Mem. at 3.) Rule 26(e)(2) states, "For an expert whose report must be disclosed under Rule 26(a)(2)(B), the party's duty to supplement extends both to information included in the report and to information given during the expert's deposition." Fed.R.Civ.P. 26(e)(2).

Plaintiffs do not provide any explanation for their failure to disclose this evidence until fourteen months after the close of discovery; therefore, the failure is not "substantially justified." Fed.R.Civ.P. 37(c)(1). However, the failure is "harmless," because Dr. Dowling's Supplemental Declaration-far from creating a genuine issue of material fact-provides substantial support for Otis's claim of noninfringement. *Id.* Therefore, I will consider this evidence.

Both Dr. Dowling's observations and experiment confirm that personal action is required to activate a passenger's RFID card. During Dr. Dowling's visit to 7WTC, he personally observed several people pass through the security turnstiles and activate their RFID card: a first person "pulled out his card and passed it by the reader;" a second person and a third person "pulled out his wallet and passed his wallet over the reader;" and a fourth person "left his card in a leather carrying case and passed the leather carrying case over the glass window" (Dowling Supp. Decl. para. 31.) The passing of the card, wallets, and leather carrying case that Dr. Dowling observed all constitute personal actions by passengers.

During his visit, Dr. Dowling also asked a woman if she would help him with an experiment to see if the

gate in the turnstile would open if she placed her RFID card at the bottom of her purse. (*Id.* para. 32.) The woman "placed the card in the bottom of her purse and walked through. The turnstile recognized her correctly, opened, and reported her floor correctly." (*Id.* para. 33.) Dr. Dowling does not state where the purse was located when the woman walked through the turnstile. However, the woman necessarily took some action to ensure that the purse passed over the top of the turnstile when she walked through; the card could not have been read if the woman simply carried the purse beside her and did not pass it over the top face of the turnstile.

Before conducting his experiment, Dr. Dowling stated, "It would be expected, especially a tall purse, that you'd want [the card] near the bottom of the purse." (Dowling Dep. at 94:5-7.) Thus, Dr. Dowling presumably had the woman "place[] the card in the *bottom* of her purse" so that it would be located within the effective range of the card reader when she passed her purse over the turnstile. (Dowling Supp. Decl. para. 33 (emphasis added).) If the card were placed in the middle of a large purse, it might not be possible to bring the card within 3.5 inches of the top of the turnstile. Moreover, the woman's act of bringing her purse (containing the card) within the effective range of the card reader-like bringing a wallet (containing a card) within the effective range of the card reader-is a personal action.

In order to active their RFID card and make an elevator call at 7WTC, passengers must do more than simply walk into the area monitored by the recognition device. They must take the personal action of placing the card (whether located in their hand, pocket, wallet, or bag) within 3.5 inches of the glass on top of a 37.5 inch-high security turnstile. Since some personal action is required to activate the RFID card, no reasonable jury could find that Otis's elevator system contains a "recognition device" *as that term is used in the '094 Patent*. Thus, Otis's "Compass with Seamless Entry" elevator system does not infringe independent claims 1 or 14 of the '094 Patent, or the claims that depend thereon. Otis is entitled to summary judgment for this reason alone.

B. Indirect Infringement

[9] [10] Although it is not alleged in their complaint, plaintiffs argue in their brief that Otis is liable for contributory infringement and active inducement of infringement of the '094 Patent. (Pl. Opp. Mem. at 14-24.) However, "Indirect infringement, whether inducement to infringe or contributory infringement, can only arise in the presence of direct infringement." *Dynacore Holdings Corp. v. U.S. Philips Corp.*, 363 F.3d 1263, 1272 (Fed.Cir.2004) (citations omitted). Since Otis's "Compass with Seamless Entry" system does not directly infringe the '094 Patent, Otis cannot be liable for contributory infringement or active inducement of infringement of the '094 Patent.

IV. Conclusion

For the foregoing reasons, I find that no reasonable jury could find that Otis infringes the '094 Patent, either directly or indirectly. Therefore, Otis's motion for summary judgment is granted and plaintiffs' motion for summary judgment is denied. The Clerk of the Court is directed to close the case.

S.D.N.Y.,2008.

Schindler Elevator Corp. v. Otis Elevator Co.