

This case comes to the Court for a decision after remand. The Federal Circuit has asked this Court to consider whether Masco's patents are literally infringed by the Government's X-07 lock, or whether the patents are infringed under the doctrine of equivalents. For the reasons set forth below, the Court finds Masco's patents are not infringed either literally or under the doctrine of equivalents. Accordingly, the Court GRANTS Defendant's cross-motion for summary judgment.

I. Background

Masco sued the United States for infringement of its patents describing electronic combination locks, and the United States has filed third party claims against the companies that manufactured and sold the accused device to the United States. The Court heard argument on claim construction and rendered an opinion with respect to several limitations of United States Patent Nos. 5,540,068 ('068 patent) and 5,778,711 ('711 patent). *Masco Corp. v. United States*, 47 Fed. Cl. 449 (2000). Both patents are continuations of United States Patent No. 5,307,656 ('656 patent). Following the Court's ruling on claim construction the Court considered the parties' cross-motions for summary judgment. The Court granted Defendant's cross-motion because the Court found Masco was collaterally estopped from proving that the accused lock similarly operated by pushing the lever into engagement or that the pulling action in the accused lock was equivalent to pushing. *Masco Corp. v. United States*, 49 Fed. Cl. 337, 344 (2001). Because Masco failed to prove the final action of the method claim, which required that rotation of a dial or knob transmit a force "to drive" a lever inside the lock into engagement with the cam wheel, Masco could not prove infringement of its patents. *Id.* at 344. Masco appealed the Court's ruling.

The Federal Circuit considered the Court's rulings on claim construction and the parties' cross-motions for summary judgment; the Federal Circuit affirmed this Court's decision in part, and remanded in part. Writing for the panel, Judge Linn reversed the Court's ruling with respect to the "transmitting a force" limitation of Claim 1 set forth in each of the '068 and '711 patents. *Masco Corp. v. United States*, 303 F.3d 1316, 1328 (Fed. Cir. 2002). The Court disagreed with this Court's holding that it was a step-plus-function limitation, and rather, the Federal Circuit held that "transmitting a force" was an act. The Court's claim construction ruling with respect to the other disputed limitations was affirmed. Relevant to this Court's decision on remand is the Federal Circuit's ruling on the "to drive" limitation. This Court interpreted the "to drive" limitation as meaning "to push." In rendering its decision on claim construction, this Court considered the plain meaning of the word "to drive" and also considered the intrinsic record, specifically the patent specification and the prosecution history. Judge Linn agreed with the Court's analysis and found that Masco's broad definition of drive is inconsistent with the specification of '068 patent and its prosecution history, as well as the prosecution history of its parent patent. *Masco*, 303 F.3d at 1325. Judge Linn said "[b]ecause the amendment distinguished the pulling action found in the German patent, Masco cannot now maintain that the proper scope of the 'to drive' term is broad enough to encompass that pulling action." *Masco Corp.*, 303 F.3d at 1325-26.

With regard to this Court's ruling concerning collateral estoppel, the Federal Circuit found that the Court erred in its finding that issue preclusion applied to the factual issues of whether the lever of the X-07 lock was pushed or pulled, and whether pushing was equivalent of pulling. The previous ruling on which issue preclusion was based is related to a previous law suit filed by Masco's predecessor LaGard, Inc. against Mas-Hamilton Group. The litigation was over the parent patent '656 and whether the accused device, the X-07, infringed the '656 patent. The district court found that the X-07 lock did not infringe the '656 patent either literally or under the doctrine of equivalents. The Federal Circuit affirmed the district's court's opinion, however, it did not reach the issue whether the lever was pushed or pulled, or the equivalence, if any, of those motions. *Masco*, 303 F.3d at 1331 (citing *Mas Hamilton II*, 156 F.3d at 1213). Judge Linn reasoned that since the Federal Circuit did not reach the push/pull issue, "Masco is not precluded from relitigating the issues of whether the lever is pushed into the cam in the X-07 lock and whether pushing and pulling are equivalent." *Id.* The Court relied on *Hannahville Indian Cmty. v. United States*, 180 Ct. Cl. 477, 485 (1967), which held:

The doctrine of res judicata must be so limited since a factual issue cannot, consistent with the statutory right to appellate review, be said to have been finally adjudicated when the appellant has been precluded from obtaining the appellate review which he sought and to which he would have been entitled if the fact had been material.

Thus, the Court remanded the push/pull issue for consideration by this Court.

On remand, the Court must rule on the parties' cross motions for summary judgment. Masco seeks summary judgment on a finding of infringement of claims 1, 2, and 3 of the '068 and '711 patents for either literal infringement or infringement under the doctrine of equivalents.¹ Defendant has filed a cross-motion on the issue of non-infringement. Oral

^{1/}

Claim 1 of the '068 patent provides:

the method comprising the steps of:

* * *

transmitting a force applied to the dial **to the lever** after the lever and the dial have been operably connected **to drive** the lever to a position where the protrusion can contact the surface of the cam wheel in such a manner that the lever will be pulled by the cam wheel during rotation of the cam wheel.

'068 Patent, Col. 8, lines 23, 37-42 (emphasis added).

Argument was held on December 18, 2002 on the issue whether the lever is pushed into the cam in the X-07 lock, and based on the existing record, whether a genuine issue of material fact would preclude summary judgment in this case. For the reasons stated below, Masco's motion for summary judgment is DENIED; Defendant's cross-motion for summary judgment is GRANTED.

II. Standard for Summary Judgment

Summary judgment is appropriate when there are no genuine issues of material fact, and thus the moving party is entitled to judgment as a matter of law. RCFC 56(c); *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 247 (1986); *Jay v. Secretary, DHHS*, 998 F.2d 979, 982 (Fed. Cir. 1993). The party moving for summary judgment bears the initial burden of demonstrating the absence of any genuine issue of material fact. *Jay*, 998 F.2d at 982. After adequate time for discovery and on motion, summary judgment is appropriate against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case, where that party will bear the burden of proof at trial. *Celotex Corp. v. Catrett*, 477 U.S. 317, 322 (1986). The Court must resolve any doubts about factual issues in favor of the non-moving party, *Chiuminatta Concrete Concepts, Inc. v. Cardinal Indus., Inc.*, 145 F.3d 1303, 1307 (Fed. Cir. 1998), and draw all reasonable inferences in its favor. *See Gasser Chair Co. v. Infanti Chair Mfg. Corp.*, 60 F.3d 770, 773 (Fed. Cir. 1995).

III. Discussion

A. Masco's patented electronic lock

Claim 1 in both the '068 and '711 patents describe a method of controlling the electronic locks at issue, and are the only independent claims in suit. The development of the technology for electronic combination locks, such as those described in the '068 and '711 patents is set forth in the Court's claim construction ruling, 47 Fed. Cl. 449. In sum, the advantage to the electronic combination locks over mechanical locks is that electronic locks are silent when the dial or knob is turned; there is no way to audibly tell when the lock actually begins to engage and withdraw the locking bolt, and thus the lock is more secure. *Id.* at 451. The operation of Masco's lock is

Claim 1 of the '711 patent has similar language:

transmitting a force applied to the knob *to the lever* through the rigid connection after the lever and the knob have been operably connected *to drive* the lever to a position where the protrusion can contact the surface of the cam wheel in such a manner that the lever will be pulled by the cam wheel during rotation of the cam wheel.

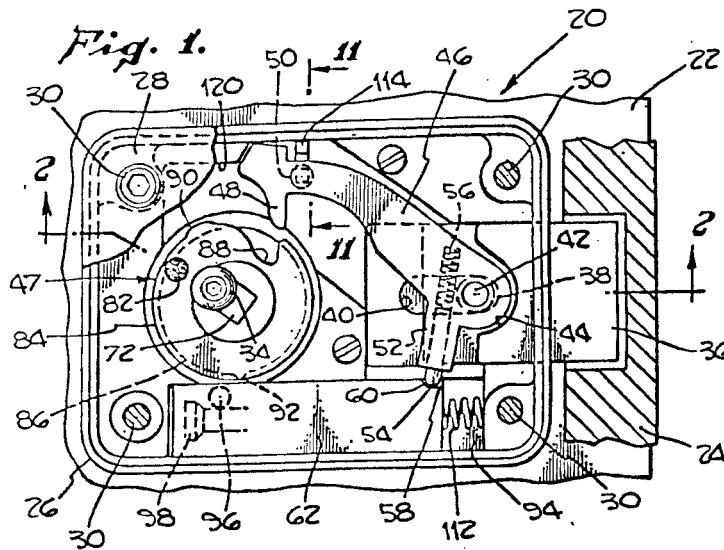
'711 Patent, Col. 8, lines 39-40.

explained thoroughly in the Federal Circuit’s opinion, *Masco*, 303 F.3d at 1320-21, and is summarized here in relevant part. The solenoid housing (No. 62)² of the Masco lock drives cantilever arm (no. 52) and lever (No. 46) counterclockwise. The force then drives lever 46 toward the cam wheel (no. 47) until a protrusion (No. 48) on the lever 46 engages a slot (No. 88) on the cam wheel. Further rotation of the cam wheel will pull the lever to the left to withdraw the locking bolt (No. 36). The Court has interpreted the drive limitation to mean “push.” The Court’s claim construction has been affirmed by the Federal Circuit.

B. The Government’s X-07 (U.S. Pat. No. 5,487,290 (“290 Patent”))

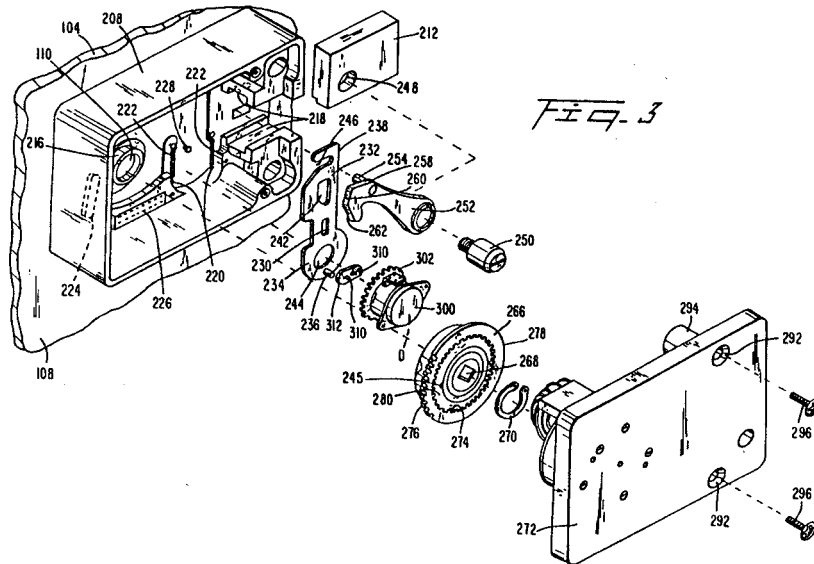
U.S. Pat. No. 5,487,290 (“290 Patent”) describes the operation of the Government’s X-07 lock. Although the Federal Circuit’s opinion details its operation, a summary will be helpful. *Masco*, 303 F.3d at 1321-22. Figure 3 of the ‘290 patent depicts the X-07 and its components from the perspective of behind a casing of the lock. Figures 6A-C of the ‘290 patent also depict the lock’s components, as in Figure 3, but also illustrate the “coaction” of the components at various stages as the lock bolt is moved to the unlocked position. U.S. Pat. No. 5,487,290, col.

^{2/} The numbers referenced correspond to the numbered items depicted in figure 1 of the ‘068 and ‘711 patents.

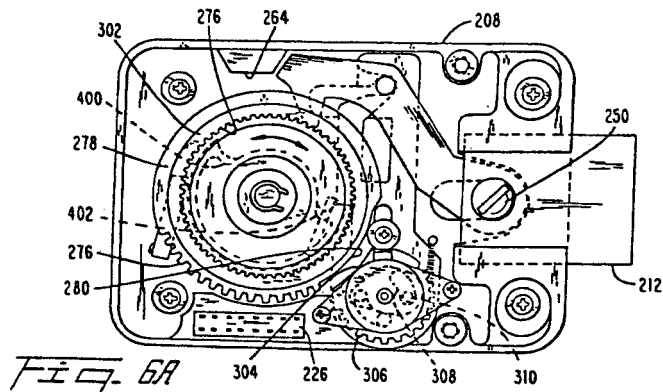


3, Fig. 6A-6C. Figure 6A of the '290 patent depicts the X-07 in its locked position. While the cam wheel in the X-07 rotates (No. 266),³ the smooth curve of the gear (No. 306)⁴ faces the cam wheel. When the correct combination is entered, the stepper motor activates, and the teeth of the gear (No. 306) turn to face the cam wheel. As the knob continues to turn, the teeth on the cam

^{3/} See Figure 3, U.S. Pat. No. 5,487,290.

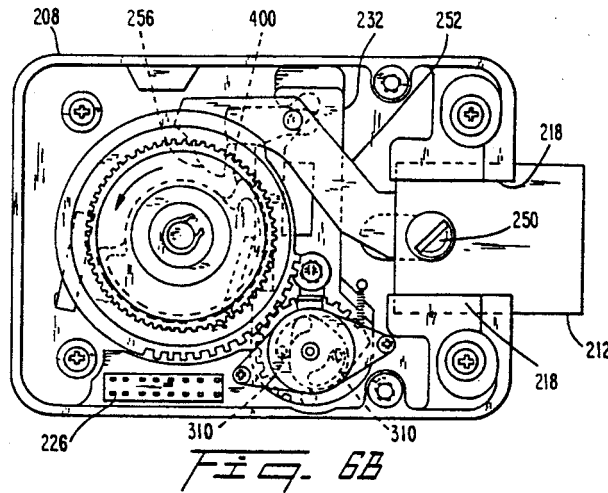


^{4/} See Figure 6A, U.S. Pat. No. 5,487,290.



wheel (No. 266) and gear mesh, and as a result the gear turns clockwise. This turning motion overcomes the tension in the springs that keep the slider (or link) (No. 232) up.⁵ Cam rotation at the bottom of the slider causes the slider (No. 232) to move downward. The slider moves the short arm (No. 256)⁶ and the lever down until it engages a slot (No. 400)⁷ on the cam wheel; continued rotation of the cam pulls the lever to the left causing it to withdraw the locking bolt.⁸

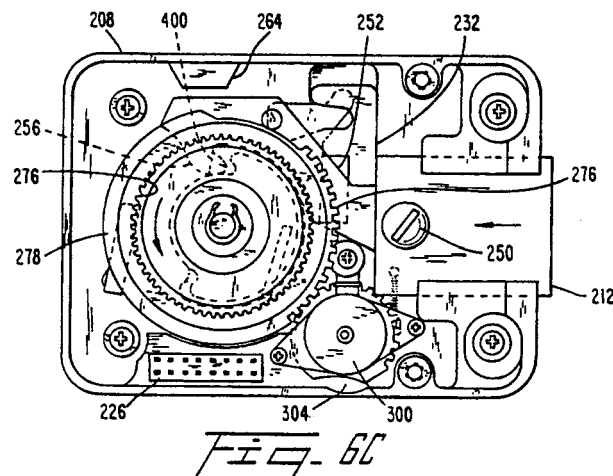
^{5/} See Figures 6A, *supra* note 4, and 6B, U.S. Pat. No. 5,487,290.



^{6/} See Figure 6B, U.S. Pat. No. 5,487,290, *supra* note 5.

^{7/} *Id.*

^{8/} See Figure 6C, U.S. Pat. No. 5,487,290.



C. The German Patent

The German patent (No. 3,817,696) is prior art, which Masco had to distinguish during prosecution of the '656 patent and '068 patent, and it operates somewhat differently. In the German lock, a tension spring pulls the lever into engagement with cam wheel. *Masco*, 303 F.3d at 1325. Masco distinguished the operation of the German lock during prosecution. Masco argued by “pushing the lever into engagement with the cam wheel,” the “positive driving mechanism” in its device distinguished its invention over the prior art. Pl.’s Ex. PX 6 at 170-71; *Masco*, 47 Fed. Cl. at 457.

IV. Infringement

A. Literal Infringement

As the Court has explained, this Court has held that the “to drive” limitation appearing in Claim 1 of both the '068 and '711 patents meant “to push.” *Masco*, 47 Fed. Cl. at 457. This portion of the Court’s claim construction ruling has been affirmed by the Federal Circuit. Therefore, in order for Masco to prove use or manufacture on a theory of literal infringement, Masco must show the Government’s X-07 lock also pushes the lock’s lever into position. Although Masco has conceded that the lever of the X-07 lock is “pulled,” Masco now argues that the lever movement of the X-07 lock “pushes.” Pl.’s Supp. Br. at 2, 3. Masco characterizes the movement of the lever in the X-07 as follows:

Manual force from the dial and cam wheel supplies the force to rotate the stepper motor gear. That gear then drives a linkage . . . [t]he linkage consists of a . . . cam, which rotates as the stepper motor gear rotates. Cam rotation acts on the opening at the bottom of . . . link or slider to drive the link down. This pushes the . . . pin on the lever down. The pin drives the lever and its protrusion into the cam wheel slot. Continued cam wheel rotation pulls the lever to the left to withdraw the bolt.

Pl.’s Supp. Br. at 3.

Masco’s theory that the X-07’s lever is pushed depends on one’s focal point on the lock, and a broad understanding of the word “push.” Masco’s characterization of the lever’s movement, quoted above, is illustrative. Masco says the force from the top of the slider pushes the pin or short arm, which then pushes the lever. Masco explains that the cam wheel drives the slider down (no. 232), and the slider then pushes the pin or short arm (no. 256) that is attached to the lever, which drives (or pushes) the lever into the cam wheel slot. Although the slider moves in a downward motion toward the cam wheel (toward the actor of the force), Masco focuses on the force at the top of the pin or short arm which causes the lever to move. Masco contends that when the slider moves down, the top of the slider pushes on the pin, which “pushes” the lever into contact with the hook on the cam wheel. Once the lever is connected with the cam wheel

hook, further knob turning withdraws the bolt connected to the lever. Pl.'s Supp. Br. at 4-5.

The Government finds a flaw in Masco's description of the movement in the X-07, specifically its focus on the force at the top of the pin. Defendant says the drive cam is the only proper frame of reference because the drive cam starts the transmission of force. Tr. at 6. Defendant notes it is undisputed that the drive cam is on the same axis as the knob or the dial. Defendant explains that the origin of force is the drive cam, and thus, it is appropriate to consider whether the lever moves toward the origin of force (the drive cam), or whether it is moved away from the force. Tr. at 6-7.

The Government's explanation appears consistent with the Court's ruling on the "to drive" limitation, and its own expert's definition of the word "push." Masco's expert witness has stated "[p]ushing means applying a force away from the actor of the force . . . Pulling means applying a force toward the actor of the force." Cutter Supp. Decl. ¶ 15.

Nevertheless, Masco has pointed to testimony in the record that it alleges supports its characterization of the movement in the X-07 lock. For example, on cross-examination, Mr. Gerald Dawson,⁹ Mas-Hamilton's chief engineer admitted that when looking from the top of the lock, one would see force from the slider pushing down on the pin. Pl.'s Supp. Br. at 3-4. Defense witness, Mr. Wolterman, Safe Lock Engineering Manager at Mas-Hamilton, agreed with Dawson's testimony. Although, when the focal point is the cam wheel, as Defendant suggests it should be, Mr. Wolterman stated the lever is pulled downward:

As the cam is rotated, the force exerted on the cam follower pin pulls the slider downward, which in turn, pulls the lever pin downward against the upward force exerted by the pair of springs. As the lever to which the lever pin is attached is pulled downward and clears the ramped surface of the lock case, it is pulled to a position where the protrusion of the lever enters a slot in the drive cam surface . . .
.. Def.'s App. 6-7.

Likewise Mr. Dawson, using the focal point of the cam wheel, testified, "[t]he slide cam is now in this position where it has pulled the slide down. The slide, in turn, pulls the lever down by a pin extruded out of the slide – or out of the lever into a slot in the slide. So it has pulled the lever down." Def.'s App. 22.

Moreover, Masco's characterization of the movement of the X-07 lever appears in part to contradict the view of Masco's expert witness, Larry Cutter, a former LaGard officer, who has designed locks himself. Mr. Cutter has conceded that the slider and the lever in the X-07 are

⁹ Mr. Dawson testified in connection with the civil action, *Mas-Hamilton Group v. LaGard, Inc.*, 21 F. Supp. 2d 700 (E.D. Ky. 1997), *aff'd*, 156 F.3d 1206 (Fed. Cir. 1998), in which LaGard, Masco's predecessor, alleged that Mas-Hamilton's X-07 lock infringed its '656 patent.

pulled downward. Originally Mr. Cutter agreed the X-07 lever was “pulled” by the slider, however, after the court’s claim construction ruling that “to drive” only meant “to push,” Mr. Cutter made a supplemental declaration, wherein he attested that a slot on the slider or link “exerts a downward, pushing force on the top of the [short arm or protrusion on the lever].” Cutter Suppl. Decl. ¶ 14. Mr. Cutter does still admit, however, that the slider and the lever are pulled downward:

The location of the gear teeth causes the teeth on the cam wheel to engage the teeth on the stepper motor gear at a precise cam wheel position. The position is such that the *linkage pulls the link and the lever downward* just as the slot on the cam wheel is below the lever protrusion so that the parts mate. The lever cannot contact the cam wheel in any other location.

Cutter Suppl. Decl. ¶ 12 (emphasis added). Despite his admission, Mr. Cutter attests that “[t]he lever is pushed in the ‘290 patent.’” Cutter Suppl. Decl. ¶ 14.

Additionally, Masco relies on broad definitions of the word “push” to support its position. Masco says that the term “push” means “to apply pressure against for the purpose of moving,” for example, pushing a shopping cart. Pl.’s Supp. Br. at 4-5. Alternatively Masco claims that “push” means “to move (an object) by exerting force against it; thrust or shove . . .” or “[t]o exert outward pressure or force against something.” Pl.’s Supp. Br. at 5. Plaintiff argues that the movement of the slot against the short arm on the X-07 lever meets these definitions. Nevertheless, Masco’s new broad definition of “push” conflicts with its own expert’s, Mr. Cutter’s, understanding of the term as set forth in his supplemental declaration. Cutter Suppl. Decl. ¶ 15. (“Pushing means applying a force away from the actor of the force . . . Pulling means apply a force toward the actor of the force”).

Finally, to demonstrate that both its locks and the X-07 “push,” Masco, on remand, attempts to compare and distinguish its lever’s movement from the German patent, and differentiate the German patent from the X-07 lock. Masco says that while the German patent is shown to have a spring that pulls the lever in a clockwise direction, both the levers in the X-07 and the Masco locks are pushed counterclockwise. Again Masco focuses on the pushing force against the pin that is part of the X-07 lever. It says the downward pushing movement acts to pivot the lever counterclockwise. Pl.’s Supp. Br. at 7.

Masco argues that for these reasons, it is entitled to summary judgment on infringement. Masco contends there is no genuine issue of material fact that would preclude a finding in its favor. Masco says summary judgment is appropriate because “[a] court may classify an apparent factual conflict as a matter of law because the ostensible factual conflict can be resolved in only one way due to the objective reality surrounding the case.” Pl.’s Supp. Br. at 8 (citing Stemple, J.W., 11 MOORE’S FED. PRAC. § 65.11[7][b] at 56-122 (3d ed. 1997)).

Defendant disagrees. The Government contends that Masco’s argument creates a genuine issue of material fact as to whether the lever on the X-07 is pulled. Moreover, Defendant argues

that Masco's theory is "based upon an artificial reading of the word pushed." Def. Supp. Br. at 14. Defendant says Masco's theory and description of the force vector fails to distinguish its lock from the German patent, and focuses on a perspective inconsistent with the claims. Def.'s Supp. Br. at 19-21.

Masco's suggestion that the push/pull distinction can be classified as a matter of law because it can be resolved in only one way, is especially compelling, although for reasons adverse to Masco's position. Based on the facts viewed in a light most favorable to Masco, the Court concludes that Defendant is entitled to summary judgment as a matter of law on the issue of literal infringement. First, there are numerous statements in the record that the lever of the X-07 lock is "pulled," even by Masco's own witness, Mr. Cutter. Cutter Decl. ¶¶ 32, 41 June 23, 2000; Cutter Decl. ¶ 12, 14, 15, 17 (Oct. 2, 2000). *See also*, Decl. of Wolterman ¶¶ 14, 16, Testimony of Dawson, Def.'s App. at 22; Masco's proposed findings of Facts 32, 37 (in support of Pl's Mot. for SJ). Moreover, Mr. Cutter's declaration is not only contrary to Masco's broad definition of "push," it largely focuses on the similarity between a "pushing" or "pulling force" and more appropriately supports a doctrine of equivalents theory of infringement. Cutter Suppl. Decl. ¶¶ 15, 16, 17, 18.

Second, Defendant's characterization of the movement of the X-07 lever is consistent with specification of the '290 patent. The '290 patent characterizes this motion as "pulling." *See* col. 9 of the '290 patent:

As previously noted, cam notch 246 at the upper distal end of sliding element 232 engages with lateral pin 254 of lever arm 252. Thus, as best understood with reference to FIGS. 6A, 6B and 6C, as sliding element 232 is forced downward, cam notch 246 thereof applies a downward pull on the hooked end of lever arm 252 to correspondingly pull hook 256 thereof downwardly toward a mechanical detent 402.

U.S. Pat. No. 5,487,290, col. 9, lines 1-8.

Third, characterization of the movement as a downward "pull" is consistent with this Court's claim construction ruling. Moreover, it respects the Federal's Circuit's ruling that Masco cannot "now maintain that the proper scope of the 'to drive' term is broad enough to encompass the pulling action." *Masco*, 303 F.3d 1325-1326. On appeal, Masco argued that during prosecution it did not contend "drive" distinguished prior art that pulled nor did it define "drive" as "push." Thus, Masco said that during prosecution it did not limit the direction of force to pushing. Masco argues similarly here that the motions are essentially the same depending on perspective. The Federal Circuit has squarely rejected that argument:

The addition of "transmitting a force applied to the dial to the lever" to the claim by itself made clear that the force that moves the lever is transmitted from the dial, not from some other source. As the Court of Federal Claims found, the patentee's use of the term "drive" in the specification equated driving with

pushing. The amendment distinguished the pushing action of the claimed invention from the pulling action disclosed in the German patent by inserting the word “drive,” denoted in the specification as a pushing action, in place of the word “move,” which had no directional connotations.

Masco, 303 F.3d at 1325. Hence, the Court cannot agree with Masco that the two motions are essentially the same.

As illustrated by the Federal Circuit’s opinion, Masco’s argument that the X-07 lever is pushed is based on a distorted view of the lock. Masco is essentially saying that everything that is pulled has a force vector on the opposite side that pushes. The Federal Circuit rejected this argument when it recognized that “drive” has a directional connotation. “Drive” was correctly interpreted as a pushing action. Defendant argues correctly that this argument recaptures “pull” in Claim 1. Def.’s Supp. Br. at 22-23, *see Masco*, 303 F.3d at 1325-26 (“Because the amendment distinguished the pulling action found in the German patent, Masco cannot now maintain that the proper scop of the ‘to drive’ term is broad enough to encompass that pulling action.”).

Thus, since the “to drive” limitation in Claim 1 has been interpreted to mean “to push,” there can be no literal infringement of the ‘068 and ‘711 patents. Masco’s own expert’s definition supports such a finding. Cutter Supp. Decl. ¶ 15. Since “[p]ushing means applying a force away from the actor of the force,” while “pulling means applying a force toward the actor of the force;” by its own definition, the lever in the X-07 is pulled toward the origin of force, or the cam wheel.

Furthermore, Mr. Cutter’s definition comports with the Federal Circuit’s understanding of the term “pull.” As the Government has pointed out, the Federal Circuit noted that Claim 1 of the ‘068 patent had been limited in an amendment during prosecution in order to distinguish Masco’s design from that of the German patent; Judge Linn described the operation of the tension spring in the German patent as pulling the lever into engagement with the cam wheel, and this pulling motion is toward the origin of force. *Masco*, 303 F.3d at 1325. Likewise, the lever of the X-07 is pulled by the slider toward the origin of force, the cam wheel.

Moreover, the Federal Circuit’s opinion clearly illustrates that the correct frame of reference for determining whether the lever is pushed or pulled is the cam wheel. Hence, the Federal Circuit opinion supports the Government’s position that the drive cam, which rotates the dial or knob is the actor of the force, and the appropriate frame of reference. The Federal Circuit recognized that the origin of force is the dial which shares an axis with the cam. *Masco*, 303 F.3d at 1325 (“the force that moves the [Masco] lever is transmitted from the dial, not from some other source”).

Thus, with respect to literal infringement, Masco has not carried its burden that it is entitled to summary judgment on the issue of infringement. Defendant, however, has established that it is entitled to a finding of non-infringement as a matter of law. Whether the X-07 lock is pushed or pulled, on these facts, could not be resolved in favor of Masco. Given the

overwhelming facts in the record that indicate the X-07 lever is pulled, no trial is necessary to determine the operation of the X-07 lock. *Cf. Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 250 (1986) (discussing the trial judge’s threshold inquiry as “whether there is the need for a trial –whether, in other words, there are any genuine factual issues that properly can be resolved only by a finder of fact because they may reasonably be resolved in favor of either party.”). It’s clear from the record that the movement of the X-07 can be characterized only as a downward pull toward the origin of force, or the cam wheel. The X-07 is not moved by the pushing force of the lever.

B. Infringement under the Doctrine of equivalents

Since Masco has failed to convince the Court that it is entitled to summary judgment on a theory of literal infringement, for Masco to prevail on its motion for summary judgment, Masco must show that the pulling motion of the X-07 lock is equivalent to pushing. Masco has relied on the doctrine of equivalents, and says that under *Festo Corp. v. Shoketsu Kinzokyo Kogyo Kabushiki*, 122 S.Ct. 1831 (2002), it is not precluded from asserting infringement under the doctrine of equivalents.

Masco asserts that the Government’s X-07 lock infringes its patent under the doctrine of equivalents, however, its supplemental brief scarcely addresses the application of the Supreme Court’s decision in *Festo* to the facts in this case. *Festo* deals with the application of prosecution history estoppel, which is “‘a rule of patent construction’ that ensures that claims are interpreted by reference to those ‘that have been cancelled or rejected.’” *Festo*, 122 S.Ct. at 1838. *Festo* is applicable because a narrowing amendment was made during prosecution history. While the doctrine of equivalents allows a patentee to show infringement of its patent based upon the insubstantial changes of the accused device that were not literally captured by the patent, the doctrine is limited, particularly where the patentee made a narrowing amendment. The Supreme Court explained in *Festo* “[w]hen, however, the patentee originally claimed the subject matter alleged to infringe but then narrowed the claim in response to a rejection, he may not argue that the surrendered territory comprised unforeseen subject matter that should be deemed equivalent to the literal claims of the issued patent.” *Festo*, 122 S.Ct. at 1838. “Estoppel arises when an amendment is made to secure the patent and the amendment narrows the patent’s scope.” *Id.* at 1840. The patentee bears “the burden of showing that the amendment does not surrender the particular equivalent in question.” *Id.* at 1842. The Supreme Court recognized, however, that there are some cases “where the amendment cannot reasonably be viewed as surrendering a particular equivalent.” *Id.* These circumstances are set forth by the Court as follows:

The equivalent may have been unforeseeable at the time of the application; the rationale underlying the amendment may bear no more than a tangential relation to the equivalent in question; or there may be some other reason suggesting that the patentee could not reasonably be expected to have described the insubstantial substitute in question. In those cases the patentee can overcome the presumption that prosecution history estoppel bars a finding of equivalence.

*Id.*¹⁰ Oral argument helped to parse out Masco’s argument on this issue.

At oral argument, Masco argued that complete surrender of pull by the Court’s ruling on claim construction was not foreseeable at the time of the amendment, and thus Masco should be able to proceed under the doctrine of equivalents. Plaintiff contends that the concept of foreseeability is not limited to after-developed technology. Tr. at 23. Defendant disagrees. The Government argues that foreseeability “talks about the equivalent,” not “about whether the limiting effect was foreseeable.” Tr. at 24-25. Thus, Defendant contends that because the Federal Circuit found Claim 1 was narrowed from “move” (no directional connotations) to “drive,” this narrowing amendment created a presumption that resort to the doctrine of equivalents is barred by prosecution history estoppel. Def.’s Supp. Br. at 25. If the Government were correct, then Masco could not argue the pulling action in the X-07 is equivalent to pushing, unless it demonstrated that this case falls within one of the circumstances delineated by the Supreme Court in *Festo*, which effectively rebut the presumption.

After analyzing each circumstance set forth by the Supreme Court, the Government contends that Masco has not overcome the presumption. First, Defendant argues that the lever movement in the X-07 lock was foreseeable because Masco was aware of the operation of the X-07 lock.¹¹ Defendant points to Masco’s acknowledgment of the X-07 lock in a 1992 letter to the Defense Logistics Agency; the 1992 General Services Administration (GSA) approval of the X-07 for use by the government; and the declaratory judgment action between LaGard (Masco predecessor) and Mas-Hamilton, wherein LaGard alleged infringement of the parent ‘656 patent. Def. Supp. Br. at 26; *Mas-Hamilton Group v. LaGard, Inc.*, 156 F.3d 1206 (Fed. Cir. 1998).

Second, Defendant states the narrowing of “move” to “drive” was not merely tangential

^{10/} In light of the Supreme Court’s ruling in *Festo*, the Federal Circuit ordered the parties to submit briefs on several issues related to the Court’s opinion; specifically, “whether rebuttal of the presumption of surrender . . . is a question of law or one of fact; and what role a jury should play in determining whether a patent owner can rebut the presumption.” *Festo Corp.*, 304 F.3d 1289 (Fed Cir. 2002). The Federal Circuit is also considering “[w]hat factors are encompassed by the criteria set forth by the Supreme Court.” *Id.*

^{11/} *Festo* provides that “[t]he equivalent may have been unforeseeable *at the time of the application.*” *Festo*, 122 S.Ct. at 1842. Contrary to the Supreme Court’s guidance, Defendant asserts that under *Sage v. Devon*, 126 F.3d 1420, 1425 (Fed. Cir. 1997), foreseeability should be measured at the time of the narrowing amendment, not at the time of the application. There is some support for Defendant’s position in the *Festo* opinion because the Supreme Court goes on to say “[t]he patentee must show *at the time of the amendment* one skilled in the art could not reasonably be expected to have drafted a claim that would have literally encompassed the alleged equivalent.” *Festo*, 122 S.Ct. at 1842 (emphasis added). Nevertheless, this distinction makes little difference in the present case because Defendant argues that the equivalent was foreseeable at both points in time.

to the purpose of the narrowing amendment because it was made to overcome prior art rejections by the PTO examiner. Def.'s Supp. Br. at 27. Plaintiff disagrees, however, and argues that the arguments made with respect to the narrowing amendment were tangential to the distinction between push and pull. Tr. at 24. Plaintiff contends that the arguments related to the origin of force and how Masco's lock was different from the prior art because "force coming from the dial . . . is different from the force coming from another location." Tr. at 24.

Finally, Defendant argues that Masco has failed to show that one skilled in the art would not have written the claim to literally encompass the asserted equivalent. In other words, Masco did not establish that a precise vocabulary did not exist at the time of the drafting. Masco argues, to the contrary, that there was no word to replace "drive." Moreover, Defendant says Masco's defense that it did not intend to surrender the pulling action is contrary to the Federal Circuit's holding, and fails. *Id.* at 28.

The Court agrees with Defendant. The Federal Circuit's opinion forecloses Masco's recovery under the doctrine of equivalents. Judge Linn explained that "[b]ecause the amendment distinguished the pulling action found in the German patent, Masco cannot now maintain that the proper scope of the 'to drive' term is broad enough to encompass the pulling action." *Masco*, 303 F.3d 1325-26. Masco gave up the pulling action that it now seeks to recover, but, Masco cannot recapture the pulling action that it surrendered during patent prosecution. Masco has introduced no evidence rebutting the presumption of prosecution history estoppel, a presumption which arose from this narrowing amendment made during prosecution.

Masco's argument that complete surrender of pull was not foreseeable because Masco did have the benefit of the Court's ruling on claim construction is unpersuasive. Foreseeability is a concept developed by Judge Rader in *Sage Prods., Inc. v. Devon Indus. Inc.*, 126 F.3d 1420, 1425 (Fed. Cir. 1997), and expanded on in *Johnson & Johnson Assoc. Inc., v. R.E. Service Co., Inc.*, 285 F.3d 1046 (Fed. Cir. 2002) (Rader, J., concurring). In *Sage Products*, Judge Rader set forth the circumstances in which foreseeability will or will not apply:

No subtlety of language or complexity of the technology, nor any subsequent change in the state of the art, such as later developed technology, obfuscated the significance of this limitation at the time of its incorporation into the claim . . . as between the patentee who had a clear opportunity to negotiate broader claims but did not do so, and the public at large, it is the patentee who must bear the cost of its failure to seek protection for this foreseeable alteration of its claimed structure.

Sage Prods., Inc., 126 F.3d at 1425.

A good example of foreseeability can be found in *Hughes Aircraft Co. v. United States*, 717 F.2d 1351, 1362 (Fed. Cir. 1983), where advances in satellite technology could not have been envisioned by the claim drafter. In *Hughes*, the claimed satellite operated by transmitting data, sun pulses, to the earth, allowing the ground crew to process the data and determine the

satellite's "existing and desired orientations." *Id.* at 1353. In the accused device a computer on board the satellite served this same function. *Id.* at 1360. The Federal Circuit found that the patentee did not surrender the subject matter related to the on-board computer; the Court explained that "the information that is transmitted to the ground crew [from the on-board computer] . . . is the modern-day equivalent of providing an indication of ISA to ground as taught by [the patentee]." *Id.* at 1365. This substantially similar variation was made possible by the "advent of computers." *Id.*

Although the Court does not expect the patent applicant to be clairvoyant, foreseeability should not be construed broadly. In *Johnson & Johnson*, Judge Rader revisited the cases that have recognized the foreseeability principle and concluded that it appropriately "relegates non-textual infringement to its appropriate exceptional place in patent policy." *Johnson & Johnson*, 285 F.3d at 1058-59. Thus, the Court concludes that Masco's broad interpretation of the foreseeability principle is in error. Simply because the complete surrender of pull was not foreseeable at the time of the amendment, does not mean the equivalent itself was not in itself foreseeable, which is the appropriate inquiry.

Masco has offered no other persuasive argument that prosecution history estoppel does not apply. The narrowing amendment to Claim 1 was made in response to a section 102 rejection by the examiner, so it cannot argue that "it bears no more than a tangential relation to the equivalent in question." Nor can it show any other reason why prosecution history estoppel should not apply.

After adequate time for discovery and on motion, summary judgment is appropriate against a party who fails to make a showing sufficient to establish the existence of an element essential to that party's case where that party will bear the burden of proof at trial (i.e., the narrowing amendment does not surrender the equivalent in question). *Celotex Corp. v. Catrett*, 477 U.S. 317, 325 (1986). The burden is on the patentee to show both that the amendment would not give rise to estoppel, and that the "amendment does not surrender the particular equivalent in question." *Festo*, 122 S.Ct. at 1842. Masco did not meet its burden. Thus, Masco is precluded from proving the pulling action of the X-07 is equivalent to the pushing action in its claimed device.

Since Masco cannot establish that the fourth action described in Claim 1 of both the '068 and the '711 patents has been performed, it cannot establish that the X-07 has infringed Claim 1 either literally or under the doctrine of equivalents. Claim 1 is the only independent claim in suit. Because Masco did not prove infringement with respect to independent Claim 1, then it likewise cannot establish infringement of the remaining claims dependent on Claim 1. *Wahpeton Canvas Co. Inc. v. Frontier, Inc.*, 870 F.2d 1546, 1553 (Fed. Cir. 1989) ("It is axiomatic that dependent claims cannot be found infringed unless the claims from which they depend have been found to have been infringed.")

V. Conclusion

Based on the foregoing discussion, the accused device does not infringe either the '068 or '711 patents either literally or under the doctrine of equivalents. The Court GRANTS Defendant's cross-motion for summary judgment and DENIES Plaintiff's motion for summary judgment. The Clerk is directed to enter judgment in favor of Defendant and Dismiss the action. No costs.

EDWARD J. DAMICH
Chief Judge