UNITED STATES DISTRICT COURT EASTERN DISTRICT OF MICHIGAN NORTHERN DIVISION

AMIT AGARWAL,

	Plaintiff,		Case No. 1:20-cv-12150
v.			Honorable Thomas L. Ludington United States District Judge
MORBARCK, LLC	7,		Officed States District stage
			Honorable Patricia T. Morris
	Defendant.	,	United States Magistrate Judge
		/	

OPINION AND ORDER OVERRULING PLAINTIFF'S OBJECTION, OVERRULING DEFENDANT'S OBJECTION, AND ADOPTING REPORT AND RECOMMENDATION

This matter is before this Court upon Magistrate Judge Patricia T. Morris's Report and Recommendation and the objections of both Plaintiff Amit Agarwal and Defendant Morbarck, LLC. ECF Nos. 40; 41; 43. According to 28 U.S.C. § 636(b)(1) and Federal Rule of Civil Procedure 72(b)(3), this Court has reviewed de novo those portions of the Report and Recommendation to which Plaintiff and Defendant have objected. For the reasons stated hereafter, Plaintiff's objection will be overruled, Defendant's objection will be overruled, and the Report and Recommendation will be adopted.

I.

This case involves the alleged infringement of U.S. Patent 6,418,004 ("the Patent"), which describes a "safety system utilizing a passive sensor to detect the presence of a hand of a worker and provide a signal to interrupt the operation of a machine" (e.g., a mobile wood-chipping machine). ECF No. 1 at PageID.15. Plaintiff owns the Patent by assignment from one of the Patent's applicants, Mr. Corey Mather. ECF No. 31 at PageID.388.

The Patent's specification explains that serious accidents have occurred in the use of wood-chipping machines owing to the possible ensnarement of workers' protective clothing. ECF No. 1 at PageID.15. A similar patent, distinguished by the applicant, used a metal sensor and metal-impregnated gloves. *See* ECF No. 38 at PageID.603. By contrast, Plaintiff's Patent uses (1) a "passive sensor incorporated into a band that the user wears", (2) a "sensing coil" mounted onto one of the chute's walls, and (3) "a [control circuitry] means for stopping the chipping blades and/or the feed rollers." ECF No. 38 at PageID.604; *see also* ECF No. 31-1 at PageID.355.

The parties dispute the construction of two relevant terms: "passive sensor" and "means for stopping the chipping blades and/or feed rollers." Thus, on May 6, 2021, Judge Morris held a hearing according to *Markman v. Westview Instruments, Inc.*, 517 U.S. 370 (1996).

On August 31, 2021, Judge Morris issued her Report and Recommendation as to both terms. ECF No. 40. Judge Morris recommends (1) that "passive sensor" should be defined as "a device that uses coils to modify the electromagnetic field which is sensed by a circuit which converts this stimulus into an output as a consequence of sensed proximity without requiring a power source"; and (2) that "means for stopping the chipping blades and/or the feed rollers in response to the signal" should be construed as (a) "Function: stopping the chipping blades and/or the feed rollers in response to the signal"; and (b) "Structure: the solenoid valve and equivalents." ECF No. 40 at PageID.661, 666–67.

Each party has filed one objection. Plaintiff objects to Judge Morris's definition of "passive sensor." ECF No. 41. Defendant objects to Judge Morris's construction of "means for stopping the chipping blades and/or the feed rollers in response to the signal." ECF No. 43.

Under Federal Rule of Civil Procedure 72, a party may object to and seek review of a magistrate judge's report and recommendation. *See* FED. R. CIV. P. 72(b)(2). If a party objects, "[t]he district judge must determine de novo any part of the magistrate judge's disposition that has been properly objected to." FED. R. CIV. P. 72(b)(3). The parties must state any objections with specificity and within a reasonable time. *Thomas v. Arn*, 474 U.S. 140, 151 (1985) (citation omitted). Parties cannot "raise at the district court stage new arguments or issues that were not presented" before the magistrate judge's final report and recommendation. *See Murr v. United States*, 200 F.3d 895, 902 n.1 (6th Cir. 2000).

When reviewing a report and recommendation de novo, this Court must review at least the evidence that was before the magistrate judge. *See Hill v. Duriron Co.*, 656 F.2d 1208, 1215 (6th Cir. 1981). After reviewing the evidence, this Court is free to accept, reject, or modify the magistrate judge's findings or recommendations. FED. R. CIV. P. 72(b)(3); *Lardie v. Birkett*, 221 F. Supp. 2d 806, 807 (E.D. Mich. 2002).

III.

The proper construction of a patent is a question of law. *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 547 U.S. 318, 325 (2015) (citing *Markman v. Westview Instruments, Inc.*, 517 U.S. 370, 388–91 (1996)). "It is a bedrock principle of patent law that the claims of a patent define the invention to which the patentee is entitled the right to exclude." *Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (internal citation and quotation marks omitted). But "there is no magic formula or catechism for conducting claim construction." *Id.* at 1324. Thus, the court is free to attach the appropriate weight to appropriate sources "in light of the statutes and policies that inform patent law." *Id.*

"[T]he words of a claim are generally given their ordinary and customary meaning . . . [which is] the meaning that the term would have to a person of ordinary skill in the art (POSITA)¹ in question at the time of the invention, i.e., as of the effective filing date of the patent application." *Id.* at 1312–13 (footnote added) (internal citations and quotation marks omitted). "[T]he ordinary meaning of a claim term is its meaning to the ordinary artisan after reading the entire patent." *Id.* at 1321 (internal quotation marks omitted). Notably, the patent's "specification is always highly relevant to the claim construction analysis. Usually, it is dispositive; it is the single best guide to the meaning of a disputed term." *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996).

Although "the claims themselves provide substantial guidance as to the meaning of particular claim terms," the court must consider the context of the claim's surrounding words. *Phillips*, 415 F.3d at 1314. Further, "[o]ther claims of the patent in question, both asserted and unasserted, can also be valuable sources of enlightenment . . . [b]ecause claim terms are normally used consistently throughout the patent." *Id.* (internal citation omitted). Similarly, any "[d]ifferences among claims can also be a useful guide . . . For example, the presence of a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Id.* at 1314–15 (internal citation omitted). That "presumption is especially strong when the limitation in dispute is the only meaningful difference between an independent and dependent claim, and one party is urging that the limitation in the dependent claim should not be read into the independent claim." *SunRace Roots Enter. Co. v. SRAM Corp.*, 336 F.3d 1298, 1303 (Fed. Cir. 2003).

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¹ A "person of ordinary skill in the art" is a hypothetical expert in the broad area of technology under which the patent falls. *See* Jeanne C. Fromer & Mark A. Lemley, *The Audience in Intellectual Property Infringement*, 112 MICH. L. REV. 1251, 1254 (2014).

It is also possible that "the specification may reveal a special definition given to a claim term by the patentee that differs from the meaning it would otherwise possess. In such cases, the inventor's lexicography governs." *Phillips*, 415 F.3d at 1316. Notably, "[e]ven when the specification describes only a single embodiment, the claims of the patent will not be read restrictively unless the patentee has demonstrated a clear intention to limit the claim scope using words or expressions of manifest exclusion or restriction." *Hill-Rom Servs., Inc. v. Stryker Corp.*, 755 F.3d 1367, 1372 (Fed. Cir. 2014) (quoting *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004)).

In addition to the specification, a court "should also consider the patent's prosecution history, if it is in evidence." *Markman v. Westview Instruments, Inc.*, 52 F.3d 967, 980 (Fed. Cir. 1995), *aff'd*, 517 U.S. 370 (1996). The prosecution history, which is "intrinsic evidence," "consists of the complete records of the proceedings before the [Patent and Trademark Office] and includes the prior art cited during the examination of the patent." *Phillips*, 415 F.3d at 1317. "[T]he prosecution history can often inform the meaning of the claim language by demonstrating how the inventor understood the invention and whether the inventor limited the invention in the course of prosecution, making the claim scope narrower that it would otherwise be." *Id*.

"In some cases, . . . the district court will need to look beyond the patent's intrinsic evidence and to consult extrinsic evidence in order to understand, for example, the background science of the meaning of a term in the relevant art during the relevant time period." *Teva Pharms. USA, Inc. v. Sandoz, Inc.*, 574 U.S. 318, 331 (2015). "Extrinsic evidence consists of all evidence external to the patent and prosecution history, including expert and inventor testimony, dictionaries, and learned treatises." *Markman*, 52 F.3d at 980. For instance, technical dictionaries can assist the court in determining the meaning of a term to those of skill in the relevant art because such

dictionaries "endeavor to collect the accepted meanings of terms used in various fields of science and technology." *Phillips*, 415 F.3d at 1318. Expert testimony can also help "ensure that the court's understanding of the technical aspects of the patent is consistent with that of a person of skill in the art, or to establish that a particular term in the patent or the prior art has a particular meaning in the pertinent field." *Id*.

Yet courts must not lose sight of the fact that "expert reports and testimony [are] generated at the time of and for the purposes of litigation and thus can suffer from bias that is not present in intrinsic evidence." *Id.* Overall, while extrinsic evidence "may be useful to the court," it is "less reliable" than intrinsic evidence, and its consideration "is unlikely to result in a reliable interpretation of patent claim scope unless considered in the context of the intrinsic evidence." *Id.* at 1318–19. Where the intrinsic record unambiguously describes the scope of the patented invention, reliance on any extrinsic evidence is improper. *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999) (citing *Vitronics*, 90 F.3d at 1583).

Finally, "[t]he construction that stays true to the claim language and most naturally aligns with the patent's description of the invention will be, in the end, the correct construction." *Renishaw PLC v. Marposs Societa' Per Azioni*, 158 F.3d 1243, 1250 (Fed. Cir. 1998). And "claims need not necessarily be limited to specific or preferred embodiments in the specification, []though they are limited to what is contained in the overall disclosure of the specification." *Phillips*, 415 F.3d at 1328–29 (Lourie, J., concurring in part and dissenting in part). Thus, a claim term that a specification references in only one way "makes clear" that the court should construe the term that way. *Id.* at 1329.

IV.

As stated hereafter, Judge Morris's recommendations accord with the law.

First, Judge Morris recommends that this Court define "passive sensor" as "a device that uses coils to modify the electromagnetic field which is sensed by a circuit which converts this stimulus into an output as a consequence of sensed proximity without requiring a power source." ECF No. 40 at PageID.661.

In response, Plaintiff objects that the limitations from dependent claims 3 and 7 should not be read into claim 1 because "[n]either claim . . . is part of this lawsuit." ECF No. 41 at PageID.670. Plaintiff suggests that Judge Morris's analysis is incorrect because courts should not "read limitations from the embodiments in the specification into the claims." *Id.* Plaintiff also claims Judge Morris should not have applied a "special definition" that the patentee used in his application because it did not "clearly express[] an intent to redefine [passive sensor]." *Id.* at 670–71. And Plaintiff argues that Judge Morris neither made a "reference to the disavowal doctrine" nor "cite[d] any evidence in the file history or specification" that indicates the patentee intended "passive sensor" to be limited to Judge Morris's proposed definition. *Id.* at 671. Finally, Plaintiff suggests that the patentee's recommended construction did not "exclude any particular feature." *Id.* Notably, Plaintiff's arguments are new arguments that were not presented before Judge Morris's Report and Recommendation and are therefore forfeited. *See Murr v. United States*, 200 F.3d 895, 902 n.1 (6th Cir. 2000).

Defendant responds that "[Plaintiff's] contention lacks merit" and that "[Plaintiff] has not articulated any principled basis for distinguishing its proposed construction." ECF No. 44 at PageID.713. Defendant elaborates that Judge Morris did not read claim 3 or claim 7 into claim 1. *Id.* at 714–15. Defendant also notes that "the intrinsic record" (i.e., the specification) confirms Judge Morris's definition. *Id.* at 716. Further, Defendant contends that "the Federal Circuit has

repeatedly rejected the notion that lexicography and disavowal must be explicit." *Id.* at 717–18 (citations omitted). In conclusion, Defendant states that Judge Morris's "recommended construction is fully consistent with the intrinsic record and should be adopted." *Id.* at 719.

Admittedly, this is a close case with seemingly contradictory precedent. On the one hand, "a dependent claim that adds a particular limitation gives rise to a presumption that the limitation in question is not present in the independent claim." *Liebel–Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 910 (Fed. Cir. 2004). On the other hand, "[t]he manner in which the patentee uses a term within the specification and claims usually will make the distinction apparent." *Phillips*, 415 F.3d at 1323 (citing *Snow v. Lake Shore & M.S. Ry. Co.*, 121 U.S. 617, 630 (1887)). Indeed, the Federal Circuit has acknowledged that "[i]n the end, there will still remain some cases in which it will be hard to determine whether a [POSITA] would understand the embodiments to define the outer limits of the claim term or merely to be exemplary in nature." *Id.* But the Federal Circuit has provided a thorough analytical structure for such cases, which places a thumb on the scale.

In *Phillips v. AWH Corp.*, the Federal Circuit walked through every type of evidence courts should consider and what priority such evidence should receive. 415 F.3d 1303 (2005) (en banc). This Court must examine the Patent, including the claims, the specification, and the Patent's history, which includes the application. And Plaintiff is correct that when reading a patent, there is a *presumption* that courts should not read limitations from a dependent claim into an independent claim. But that presumption has been rebutted here.

The *Phillips* court repeatedly referred to the specification and took its time to emphasize that the specification "is the single best guide to the meaning of a disputed term." *Id.* at 1315 (citation omitted). The *Phillips* court elaborated that "[t]he importance of the specification in claim construction derives from its statutory role." *Id.* at 1316. As a thumb on the scale, the *Phillips*

concurrence clarifies an ambiguity in the majority's opinion that is particularly relevant here: "[C]laims need not necessarily be limited to specific or preferred embodiments in the specification, []though they are limited to what is contained in the overall disclosure of the specification." *Id.* at 1328–29 (Lourie, J., concurring in part and dissenting in part).

The ambiguity regarding "passive sensors" is akin to the ambiguity in *Phillips* regarding "baffles." Dependent claims in both cases offer seemingly alternative constructions of the term in the independent claim. But, like Judge Lourie's observation in *Phillips*, this Patent's specification contains "no reference to [passive sensors] that show[s] them to be other than [containing coils]." *Id.* at 1329; *see, e.g.*, U.S. Patent No. 6,418,004 B1 fig. 1, item 21 (filed Dec. 2, 1999); ECF No. 31-1 at PageID.355 ("FIG. 1 is a circuit diagram of a passive sensor according to an embodiment of the invention "); *id.* ("FIG. 1 shows an example of a passive sensor 20. The sensor comprises a tuned circuit consisting of a coil 21 and a capacitor 22 connected in parallel with the coil."); *id.* at PageID.356 ("The passive sensor coils worn by the machine operator function to modify the electromagnetic field produced by coil 32 whenever the passive sensor coils are close enough to the coil 32."); *id.* ("When coil 32 detects the proximity of a passive sensor coil, R1 is de-energised and contact C1 moves to its normally closed position").

The Patent's specification discusses explicit exceptions and alternatives to other features of the invention but not to the passive sensor having a coil. *See, e.g., id.* at PageID.355 ("Of course the sensors need not be incorporated into a band and may be worn or otherwise carried by the operator."); *id.* ("The passive sensor may be incorporated in a band normally worn or carried by the machine operator"); *id.* ("The sensing coil may be configured as a spiral or as a number of turns of wire with a non-circular path"); *id.* ("If necessary, the sensing coil may be insulated from the chute"). Indeed, the Patent's specification even provides an alternative coil construction,

indicating that the Patent assumes that the passive sensor will contain a coil. *See id.* ("The coil may have any suitable number of turns and the turns may be wound in a spiral to present a helical or a substantially flat-shaped circular coil."). Moreover, the specification gives an alternative construction of the entire invention that requires a passive sensor with a coil. *See id.* at 356 ("If the system of the invention were used with equipment other than the wood chipping machine 9, a coil like coil 32, passive sensors and other components would still be necessary").

At first glance, two sentences seemingly indicate that the patentee contemplated a non-coil alternative. *See id.* at 355 ("The passive sensor may consist of a tuned circuit. Preferably the tuned circuit consists of a coil and a capacitor connected in parallel with one another."). But, upon further examination, those sentences suggest a parallel-connection alternative that assumes a coil is in the passive sensor. And, again, the specification in its entirety offers only "passive sensor" alternatives that contain a coil and, therefore, modify an electromagnetic field. In this way, the specification unambiguously defines the term "passive sensor." *See Pitney Bowes, Inc. v. Hewlett-Packard Co.*, 182 F.3d 1298, 1308 (Fed. Cir. 1999). Moreover, Judge Morris's analysis of the remaining intrinsic and extrinsic evidence and her conclusions from it are sound. *See* ECF No. 40 at PageID.659–61; Gary M. Fox, *Understanding* Nautilus's *Reasonable-Certainty Standard: Requirements for Linguistic and Physical Definiteness of Patent Claims*, 116 MICH. L. REV. 329, 335 (2017) ("Reasonable certainty of a claim's scope is now the touchstone for courts evaluating whether claims are sufficiently definite.").

For those reasons, this Court will overrule Plaintiff's Objection and adopt Judge Morris's recommended definition of "passive sensor" as "a device that uses coils to modify the electromagnetic field which is sensed by a circuit which converts this stimulus into an output as a

consequence of sensed proximity without requiring a power source." ECF No. 40. at PageID. 666–67.

B.

Second, Judge Morris recommends that this Court construe "means for stopping the chipping blades and/or the feed rollers in response to the signal" as "function: stopping the chipping blades and/or the feed rollers in response to the signal" and "structure: the solenoid valve and equivalents." ECF No. 40 at PageID.667 (quotation marks omitted).

In response, Defendant objects that Judge Morris's "construction omitted structure from the specification that is necessary for the performance of the agreed-upon function." ECF No. 43 at PageID.685. In effect, Defendant has recited the same argument from its *Markman* Brief. *See* ECF No. 31 at PageID.345–47. Specifically, Defendant claims that alarm circuit 40 "should supplant the 'solenoid valve' as the corresponding structure as a matter of law." ECF No. 43 at PageID.686. Defendant elaborates that the specification "provides the following chain of events from receipt of 'the signal' from the sensing coil to the 'stopping of the chipping blades and/or feed rollers'":

First, the signal generated by the sensing coil is received by an alarm circuit 40. The alarm circuit 40 includes a microprocessor, shown in Figure 5. The microprocessor generates an output signal 50 if—and only if—the microprocessor detects the passive sensor. The output signal 50 actuates a relay switching circuit. The relay switching circuit includes transistors Q1, Q2, and Q3 of Figure 4. The relay switching circuit closes the solenoid valve 3. When the solenoid valve 3 closes, hydraulic fluid does not flow to the hydraulic motors 6. This stops the motors 6 from spinning. When the motors 6 are not spinning, the feed rollers are stopped.

Id. at 688 (internal citations omitted). To wit, Defendant asserts that "the alarm circuit 40 **indirectly** stops the feed rollers because it is the **only** structure that receives the signal from the sensing coil." *Id.* at PageID.689 (emphasis in original); *see also id.* at PageID.691 ("Because the

solenoid valve does not respond to the signal from the sensing coil, as conceded in the Report, it is impossible for the sensing coil (by itself) to perform the stated function").

Plaintiff responds that Defendant's arguments are "unavailing" because "[t]he law does not recognize indirect performance as the legal test for corresponding structures." ECF No. 45 at PageID.724. Specifically, Plaintiff contends that Judge Morris's construction was correct because "[o]ne could plug the sensing coil directly into the solenoid valve." *Id.* at PageID.725. Finally, Plaintiff states that importing "the exclusive subject matter of claim 7" into independent claim 1 "would violate settled patent law" *Id.* (citing *SRI Intern v. Matsushita Elec. Corp. of America*, 775 F.2d 1107, 1122 (Fed. Cir. 1985) (en banc)).

Claim construction for means-plus-function limitations requires that (1) the function be recited in the claim limitation and that (2) the specification disclose a structure to perform this function. *Default Proof Credit Card Sys., Inc. v. Home Depot U.S.A., Inc.*, 412 F.3d 1291, 1298 (Fed. Cir. 2005). "Structure disclosed in the specification qualifies as 'corresponding structure, material, or acts' if the intrinsic evidence clearly links or associates that structure to the recited function in the claim." *Michelotti v. Bosch*, 204 F.Supp.3d 938, 945–46 (E.D. Mich. 2016) (citing *Williamson v. Citrix Online, LLC*, 792 F.3d 1339, 1352 (Fed. Cir. 2015)). Although "corresponding structure need not include all things necessary to enable the claimed invention to work," *Cardiac Pacemakers, Inc. v. St. Jude Med., Inc.*, 296 F.3d 1106, 1119 (Fed. Cir. 2002), "it must include all structure that actually performs the recited function," *Home Depot*, 412 F.3d 1291, 1298.

The tell-tale in this case is the last clause in the agreed-upon function: "in response to the signal." *See* ECF No. 40 at PageID.662. Defendant is correct that the corresponding structure must include all structure that "actually performs" the recited function but is incorrect that alarm circuit

40 plays that role. See ECF No. 43 at PageID.690–91. As Judge Morris pointed out, "the solenoid valve . . . responds to the output of the circuit after the circuit [40] responds to the alarm." ECF No. 40 at PageID.664 (emphasis added). The agreed-upon function is likewise completed "in response to the signal" (i.e., after circuit 40 responds and sends the signal). That is, the solenoid valve—not circuit 40—stops the "chipping blades and/or feedrollers." See id. For that reason, Judge Morris's conclusion includes all structure that actually perform the recited function. See id. at PageID.665–66.

The specification supports Judge Morris's recommendation. *See Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996) (holding that the patent's "specification is the single best guide to the meaning of a disputed term.").

At one point, the specification states that the invention requires a solenoid valve but not circuit 40 or any other post-signal components. ECF No. 31-1 at PageID.356 ("In [the wood-chipping machine] example application *solenoid valve 3 in FIG. 3 is necessary* to ensure that drive to the feed rollers 11 is discontinued.") (emphasis added). The specification elaborates that implementing the invention in "equipment other than the wood chipping machine," a solenoid valve would not be required because "some other device" would "achieve activation and deactivation of the equipment being controlled." *Id.* To wit, the specification states that the agreed-upon function requires the solenoid valve or equivalents to it but does not require any other component that contributes to the agreed-upon function after the sensing coil outputs its signal.

Ultimately, that indicates the patentee's intent to require only a solenoid valve or its equivalents but not circuit 40 or its equivalents. Indeed, as Plaintiff pointed out, an inventor "could [instead] plug the sensing coil directly into the solenoid valve." ECF No. 45 at PageID.725. Although circuit 40 may indirectly relay the signal, it does not "actually perform[] the recited

function." Home Depot, 412 F.3d 1291, 1298 (emphasis added). Moreover, Judge Morris's

analysis of the remaining intrinsic and extrinsic evidence and her conclusions from it are cogent.

See Tun-Jen Chiang, Forcing Patent Claims, 113 MICH. L. REV. 513, 550, 550 n.194 (2015) ("The

bottom line is that the patent system has a long-term policy interest in incentivizing patentees not

only to write a claim but to write a precise claim that actually conveys information.").

For those reasons, this Court will overrule Defendant's objection and adopt Judge Morris's

recommended construction of "means for stopping the chipping blades and/or the feed rollers in

response to the signal" as "function: stopping the chipping blades and/or the feed rollers in

response to the signal" and "structure: the solenoid valve and equivalents."

V.

Accordingly, it is **ORDERED** that Plaintiff's Objection, ECF No. 41, is **OVERRULED**.

Further, it is **ORDERED** that Defendant's Objection, ECF No. 43, is **OVERRULED**.

Further, it is **ORDERED** that Judge Morris's Report and Recommendation, ECF No. 40,

is **ADOPTED**.

Dated: November 5, 2021

s/Thomas L. Ludington

THOMAS L. LUDINGTON

United States District Judge

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