

NOTE: This disposition is nonprecedential.

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

VEHICLE INTELLIGENCE AND SAFETY LLC,
Plaintiff-Appellant

v.

MERCEDES-BENZ USA, LLC, DAIMLER AG,
Defendants-Appellees

2015-1411

Appeal from the United States District Court for the Northern District of Illinois in No. 1:13-cv-04417, Senior Judge William T. Hart.

Decided: December 28, 2015

KEVIN ROE, Vehicle Intelligence and Safety LLC, Campbell, CA, for plaintiff-appellant.

SCOTT W. DOYLE, Fried, Frank, Harris, Shriver & Jacobson LLP, Washington, DC, for defendants-appellees. Also represented by JONATHAN RICHARD DEFOSSE.

Before MOORE, CLEVINGER, and REYNA, *Circuit Judges.*

PER CURIAM.

Vehicle Intelligence and Safety LLC appeals from the Northern District of Illinois’s judgment declaring claims 8, 9, and 11–18 of U.S. Patent No. 7,394,392 (“disputed claims”) invalid as drawn to patent-ineligible subject matter under 35 U.S.C. § 101.¹ Because the disputed claims cover only abstract ideas coupled with routine data-gathering steps and conventional computer activity, we *affirm*.

BACKGROUND

The ’392 patent claims methods and systems that screen equipment operators for impairment, selectively test those operators, and control the equipment if an impairment is detected. ’392 patent at Abstract. The ’392 specification lists examples of equipment within the scope of its claims, including “automobiles, trucks, industrial vehicles, public transportation vehicles, such as buses, subways, trains, planes, and ships, and dangerous machinery in general.” *Id.* at 3:55–57. It also provides examples of the types of impairments its claimed methods and systems may screen for and test: intoxication (from alcohol or chemicals); physical impairments (injuries from accidents or “violence against” the operator, blindness, lack of air, or poisonous or disabling gases or dust); medical impairments (stroke, heart attack, diabetic coma, exhaustion, or infectious disease); or emotional impairment (grief, anger, psychosis, anxiety, or euphoria). *Id.* at 5:25–38. It provides similarly broad lists of examples of

¹ We note that despite the district court’s general statement in its dismissal opinion and order that the ’392 patent is invalid, the district court only analyzed claims 8, 9, and 11–18 in its opinion and the parties only discuss these claims on appeal. We interpret the order as limited to these claims.

the characteristics its claimed methods and systems can screen for, *id.* at 6:11–31, other factors that can be selectively tested for, *id.* at 7:60–8:3, and how the equipment can be controlled, *id.* at 8:14–31. According to Vehicle Intelligence, the “most important” claims are 8 and 16, Appellant’s Br. 5–6, which recite:

8. A method to screen an equipment operator for impairment, comprising:

screening an equipment operator by one or more expert systems to detect potential impairment of said equipment operator;

selectively testing said equipment operator when said screening of said equipment operator detects potential impairment of said equipment operator; and

controlling operation of said equipment if said selective testing of said equipment operator indicates said impairment of said equipment operator, wherein said screening of said equipment operator includes a time-sharing allocation of at least one processor executing at least one expert system.

16. A system to screen an equipment operator, comprising:

a screening module to screen and selectively test an equipment operator when said screening indicates potential impairment of said equipment operator, wherein said screening module utilizes one or more expert system modules in screening said equipment operator; and

a control module to control operation of said equipment if said selective testing of

said equipment operator indicates said impairment of said equipment operator, wherein said screening module includes one or more expert system modules that utilize at least a portion of one or more equipment modules selected from the group of equipment modules consisting of: an operations module, an audio module, a navigation module, an anti-theft module, and a climate control module.

In June 2013, Vehicle Intelligence brought suit against Mercedes-Benz USA, LLC and Daimler AG (“Defendants”), alleging infringement of the ’392 patent. Defendants moved for judgment on the pleadings under Federal Rule of Civil Procedure 12(c), which the district court denied without prejudice to renewal after claim construction. Following claim construction, the district court granted Defendants’ second Rule 12(c) motion, declaring the disputed claims invalid as drawn to patent-ineligible subject matter under 35 U.S.C. § 101 and dismissing the case with prejudice. Vehicle Intelligence appeals. We have jurisdiction under 35 U.S.C. § 1295(a)(1).

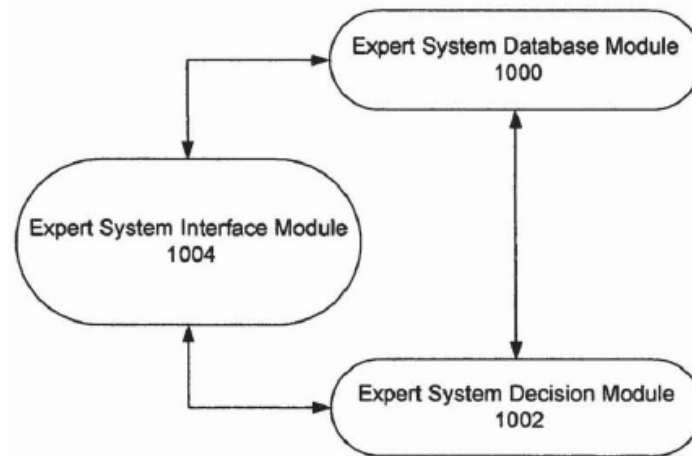
DISCUSSION

We review judgments arising from motions to dismiss under the law of the regional circuit. *OIP Techs., Inc. v. Amazon.com, Inc.*, 788 F.3d 1359, 1362 (Fed. Cir. 2015). The Seventh Circuit reviews appeals of dismissals pursuant to Federal Rule of Civil Procedure 12(c) de novo, applying the same standard used for dismissals for failure to state a claim under Rule 12(b)(6). *Buchanan-Moore v. Cty. of Milwaukee*, 570 F.3d 824, 827 (7th Cir. 2009). Because patent eligibility under 35 U.S.C. § 101 is an issue of law, we review it de novo. *OIP Techs.*, 788 F.3d at 1362.

The district court determined, and the parties do not dispute, that the claims at issue fall within the broad categories identified in 35 U.S.C. § 101 (i.e., “any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof”). The question on appeal is whether these claims fall into the judicially created exception of patent-ineligible abstract ideas. To answer this question, we apply the two-step test introduced in *Mayo Collaborative Services v. Prometheus Laboratories, Inc.*, 132 S. Ct. 1289, 1296–98 (2012), and further explained in *Alice Corp. Party v. CLS Bank International*, 134 S. Ct. 2347, 2355 (2014). First, we “determine whether the claims at issue are directed to a patent-ineligible concept.” *Alice*, 134 S. Ct. at 2355. Second, we “examine the elements of the claim to determine whether it contains an ‘inventive concept’ sufficient to ‘transform’ the claimed abstract idea into a patent-eligible application.” *Id.* at 2357. This step requires examining the elements of each claim both individually and as an ordered combination. *Id.* at 2355. As the Supreme Court has explained, “transformation into a patent-eligible application requires more than simply stating the abstract idea while adding the words ‘apply it.’” *Id.* (quoting *Mayo*, 132 S. Ct. at 1294) (internal quotation marks and alterations omitted).

We agree with the district court that *Mayo/Alice* step one is met here. The claims at issue are drawn to a patent-ineligible concept, specifically the abstract idea of testing operators of any kind of moving equipment for any kind of physical or mental impairment. None of the claims at issue are limited to a particular kind of impairment, explain how to perform either screening or testing for any impairment, specify how to program the “expert system” to perform any screening or testing, or explain the nature of control to be exercised on the vehicle in response to the test results.

Much of Vehicle Intelligence’s briefing centers on the use of an “expert system” that improves over the prior art by providing faster, more accurate and reliable impairment testing. But neither the claims at issue nor the specification provide any details as to how this “expert system” works or how it produces faster, more accurate and reliable results. The most detailed description of the “expert system” is in Figure 8 of the ’392 patent:



See also ’392 patent at 10:65–67 (“FIG. 8 illustrates an expert system implementation of the screening module **104** shown in FIG. 1 to screen an equipment operator. . . .”). The description for Figure 8 states that the “decision module **1002** makes the actual determination of whether or not the equipment operator is impaired and decides which control response to make if there is an impairment.” *Id.* at 11:5–9. It then lists equipment operator characteristics that may be measured and states that this information is used to determine if the equipment operator has a “true impairment.” *Id.* at 11:9–33; *see also id.* at 11:44–60. But critically absent from the entire patent is how the existing vehicle equipment can be used to measure these characteristics; assuming these measurements can be made, how the decision module determines if an

operator is impaired based on these measurements; assuming this determination can be made, how the decision module decides which control response to make; and assuming the control response decision can be made, how the “expert system” effectuates the chosen control response. At best, the ’392 patent answers the question of how to provide faster, more accurate and reliable impairment testing by simply stating “use an expert system.” Thus, in the absence of any details about how the “expert system” works, the claims at issue are drawn to a patent-ineligible abstract idea, satisfying *Mayo/Alice* step one.

Vehicle Intelligence challenges the district court’s application of *Mayo/Alice* step one, arguing that the district court erred in finding this step satisfied because the claims at issue do not preempt all equipment operator testing. It argues that the existence of prior art methods of equipment operator testing, evidenced by the eleven prior art references identified in the ’392 specification, prove that the claims at issue do not preempt the abstract idea of performing equipment operator testing because these references describe non-infringing methods for doing so. This argument is meritless. As the Supreme Court has explained, the preemption concern is the basis for the creation of the three judicial exceptions to statutory patent eligibility. *Alice*, 134 S. Ct. at 2354–55. And while assessing the preemptive effect of a claim helps to inform the *Mayo/Alice* two-step analysis, the mere existence of a non-preempted use of an abstract idea does not prove that a claim is drawn to patent-eligible subject matter. If we adopt Vehicle Intelligence’s argument, all a patentee would need do to insulate itself from a § 101 challenge would be to identify a single prior art reference in the specification and state that its invention improves upon that reference. Vehicle Intelligence’s additional arguments regarding *Mayo/Alice* step one do not remove the claims from being drawn to patent-ineligible abstract ideas. Moreover, many of these arguments are more

properly considered in *Mayo/Alice* step two, and are addressed below.

We also agree with the district court that the claims at issue fail *Mayo/Alice* step two. Nothing in these claims—considered as individual elements or an ordered combination—disclose an inventive concept sufficient to transform the abstract idea of testing operators of any kind of moving equipment for any kind of physical or mental impairment into a patent-eligible application of that idea.

Vehicle Intelligence argues that its methods are embedded in “specialized existing equipment modules,” as opposed to generic computers, which renders them patent-eligible. Appellant’s Br. 15. The ’392 specification explains that the “specialized existing equipment modules” are things such as the gas and brake pedals and the steering wheel of a car (*i.e.*, “equipment operations module allowing the equipment operator to control . . . speed of operation and direction of movement”), and stereo, navigation, anti-theft, and climate-control systems. ’392 patent at 6:32–49, 12:10–15. But markedly absent from the ’392 patent is any explanation of how the methods at issue can be embedded into these existing modules. The only details related to this point provided in the claims at issue is that the methods involve using “at least a portion of” these existing equipment modules (claims 9, 12, and 16–18) and “a time-sharing allocation of at least one processor executing at least one expert system” (claims 8, 9, and 11–15). The specification does not provide any more detail and, in fact, explains that the processors used in the methods may be “based on any commercially available microprocessor of any word bit width and clock speed, a control Read-Only-Memory, or a data processing equivalent.” *Id.* at 7:9–22. As Vehicle Intelligence admits, executing its expert systems using existing equipment modules “would entail hardware and software differences compared to execution in a larger generic

computer.” Appellant’s Br. 23. Yet the ’392 patent is completely devoid of any explanation of what these hardware and software differences are, let alone any explanation how to implement them using the existing equipment modules. We note the district court’s claim construction of the term “expert system(s).” *Vehicle Intelligence & Safety LLC v. Mercedes-Benz USA, LLC*, No. 13 C 4417, 2014 WL 4652563, at *3 (N.D. Ill. Sept. 18, 2014). This construction does not affect our conclusion regarding patentability because Vehicle Intelligence does not argue, and it is not apparent from the record, that the construction requires anything beyond a purely conventional computer implementation. *See Alice*, 134 S. Ct. at 2358. Vehicle Intelligence’s argument harkens back to our pre-*Alice* machine-or-transformation test in arguing that the claimed methods are tied to particular machines and that alone is sufficient to confer eligibility. But, post-*Mayo/Alice*, this is no longer sufficient to render a claim patent-eligible. *DDR Holdings, LLC v. Hotels.com, L.P.*, 773 F.3d 1245, 1256 (Fed. Cir. 2014). Merely stating that the methods at issue are performed on already existing vehicle equipment, without more, does not save the disputed claims from abstraction.

Vehicle Intelligence argues that there are at least four inventive concepts in the claims at issue: 1) screening by one or more expert systems; 2) selectively testing; 3) a time-sharing allocation of at least one processor; and 4) a screening module that includes one or more expert systems that use at least a portion of one or more equipment modules. But the claims do not specify what screening should be done or how the expert system would perform such screening. They do not explain how to select the tests to run or even what tests to select from. They do not explain how the “time-sharing allocation” on a processor should be done. And they do not explain how the expert system works to screen for impairments or how such systems can be portioned out over one or more equipment

modules. The claims merely state the abstract idea of testing an equipment operator for impairments using an unspecified “expert system” running on equipment that already exists in various vehicles. This is not sufficient to pass *Mayo/Alice* step two. *See Alice*, 134 S. Ct. at 2355.

Finally, Vehicle Intelligence argues that our analysis in *DDR Holdings* applies to the claims at issue here. Appellant’s Br. 19. It argues that its claims are necessarily rooted in computer technology in order to satisfy a need for faster, more accurate and reliable impairment testing of vehicle operators, a problem it characterizes as “truly life or death.” *Id.* There are two problems with this argument. The claims at issue are not “necessarily rooted in computer technology in order to overcome a problem specifically arising in the realm of computer networks” as in *DDR Holdings*. 773 F.3d at 1257. The claims do not address a problem arising in the realm of computer networks—they are broadly drafted to cover testing a vehicle operator for impairments, similar to a police officer field-testing a driver for sobriety. Second, the claims at issue do not recite faster, more accurate and reliable impairment testing than what was known in the prior art. As explained above, they merely recite using an undefined “expert system” to screen and test for impairments. The specification does not explain how this “expert system” achieves any improvements over the prior art. Rather, the specification lists “at least ten major advantages to using expert system screening in conjunction with already existing modules in equipment to detect impairment in an equipment operator” without explaining how the expert system achieves these advantages. ’392 patent at 6:50–7:8. Such bald assertions made at such a high level of generality and not tied to any claim language do not provide an “inventive concept” sufficient to save these claims from patent-ineligibility. We have considered Vehicle Intelligence’s remaining arguments and they are without merit.

CONCLUSION

For the foregoing reasons, the judgment of the district court is *affirmed*.

AFFIRMED

COSTS

Costs to Mercedes-Benz USA, LLC and Daimler AG.