

NOTE: This disposition is nonprecedential.

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

IN RE: 55 BRAKE LLC,
Appellant

2014-1554

Appeal from the United States Patent and Trademark
Office, Patent Trial and Appeal Board in No. 95/001,449.

Decided: April 13, 2015

MATTHEW J.M. PREBEG, Prebeg, Faucett & Abbott
PLLC, Houston, TX, for appellant. Also represented by
ZHE WANG.

NATHAN K. KELLEY, Office of the Solicitor, United
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intervenor Michelle K. Lee. Also represented by MARY L.
KELLY, WILLIAM LAMARCA, THOMAS W. KRAUSE.

Before CHEN, BRYSON, and HUGHES, *Circuit Judges*.

PER CURIAM.

The Patent Trial and Appeal Board relied on eight
prior-art references individually or in combination to find
certain claims of U.S. Patent. No. 6,450,587 (the '587

patent) invalid as obvious or anticipated. 55 Brake LLC appeals the Board's validity determinations, but its challenge turns on issues of claim construction. Because the Board correctly construed the claims, we need not reach the specifics of the Board's anticipation and obviousness findings. We affirm.

I

The '587 patent relates to a system for automatically locking a vehicle's brakes under certain predetermined conditions. '587 patent, Abstract. The patent teaches using "sensors to detect . . . potentially unsafe conditions in or around the vehicle" and "to automatically control the brakes" when appropriate. *Id.* at col. 4 ll. 5–11. It provides a variety of examples where "movement of a vehicle may be unsafe," including when a driver exits the vehicle, when a vehicle door or latch is open, and when a person or vehicle is close enough to the vehicle to create a potential for collision. *See id.* at col. 2. ll. 37–51; *see also id.* at col. 4 ll. 11–24. The claimed invention also permits a driver to manually apply the brakes and includes a sensor to "prevent[] automatic setting of the brake while the vehicle is traveling." *Id.* at col. 3 ll. 55–62; *id.* at col. 6 ll. 6–8.

Claim 7 is representative of the invention and includes (1) a plurality of sensors for sensing driving conditions; (2) a management mechanism for applying the vehicle's brakes; and (3) a controller connected to the sensors and the management mechanism that actuates the management mechanism when the sensors sense unsafe driving conditions and when the vehicle is not moving above a predetermined speed. *Id.* at col. 23 ll. 18–38.

In April 2008, 55 Brake sued several vehicle manufacturers, alleging infringement of the '587 patent. Two years later, a defendant filed a request for inter partes reexamination of the '587 patent. The Patent Office granted the request and found certain claims invalid as

anticipated or obvious under 35 U.S.C. § 103. 55 Brake appeals. We have jurisdiction under 28 U.S.C. § 1295(a)(4).

II

We review the Board's claim construction de novo if it is based solely on the intrinsic record. *Teva Pharm. USA, Inc. v. Sandoz, Inc.*, 574 U.S. ___, 135 S. Ct. 831, 840–41 (2015); *In re Teles AG Informationstechnologien*, 747 F.3d 1357, 1366 (Fed. Cir. 2014). During reexamination, the Board must give claims their “broadest reasonable construction consistent with the specification.” *In re Teles*, 747 F.3d at 1366 (citing *Rambus v. Rea*, 731 F.3d 1248, 1252 (Fed. Cir. 2013)).

The Board correctly construed the term “plurality of sensors” to include a “vehicle motion sensor.” The plain language of the claims defines a vehicle motion sensor as one of the “plurality of sensors.” For example, claim 7 recites in relevant part:

a plurality of sensors adapted to . . . sense conditions at the stations;

a solid-state controller . . . [which] in response to signals from the plurality of sensors indicating a condition that is unsafe for vehicle movement, [] actuate[s] the management mechanism to apply the brakes, wherein one of said plurality of sensors is a vehicle motion sensor, and wherein the controller does not actuate the management mechanism to apply the brake mechanism if the vehicle motion sensor signals the controller that the vehicle is moving above a certain speed.

'587 patent col. 23 ll. 25–38 (Claim 7); *see also id.* at col. 24 ll. 9–10 (Claim 9 reciting “one of said plurality of sensors being a vehicle motion sensor”). 55 Brake agrees that the plain meaning of “plurality” is “two or more.” Because plurality means “two or more,” and the claims

expressly recite that “one of said plurality of sensors is a vehicle motion sensor,” it follows that only one additional sensor is required to meet the claims. *See Phillips v. AWH Corp.*, 415 F.3d 1303, 1312 (Fed. Cir. 2005) (en banc) (“[W]e look to the words of the claims themselves . . . to define the scope of the patented invention.”) (quoting *Vitronics Corp. v. Conceptronic, Inc.*, 90 F.3d 1576, 1582 (Fed. Cir. 1996)).

The recitation of a vehicle motion sensor as one of the plurality of sensors is consistent with the specification and the remainder of the claim limitations. As the Board explained, claim 7 only requires that “signals (plural) from the plurality of sensors (plural) indicate a condition (singular) that is unsafe for vehicle movement.” J.A. 12. In other words, the claims do not require each sensor to be individually capable of sensing an unsafe driving condition. This is consistent with the specification’s description of sensors that, like a vehicle motion sensor, are incapable of individually sensing an unsafe driving condition. For example, the specification describes sensors to detect: whether a driver “leaves the vehicle, or is otherwise not in a position to safely operate the vehicle”; whether a car door or trunk is open; and whether a passenger is attempting to enter or exit the vehicle. ’587 patent col. 2 ll. 34–45. These conditions can reasonably be understood as “unsafe” only when the vehicle is in motion. *See id.* at ll. 34–36.

55 Brake argues that the vehicle motion sensor cannot be one of the “plurality of sensors” because the motion sensor does not actuate the automatic brake mechanism. But the specification describes an embodiment where a vehicle motion sensor, such as a conventional speedometer, may be used to signal the controller to prevent automatic braking. ’587 patent col. 6 ll. 6–14. While 55 Brake is correct that preventing actuation of a brake mechanism and affirmatively actuating the brake appear conceptually different, this subtle difference is insufficient

to rebut the plain language of claims 7 and 9, which define a vehicle motion sensor as one of the plurality of sensors. Moreover, even though the specification does not expressly include an embodiment where a vehicle motion sensor actuates a brake mechanism, this is not sufficient to require the adoption of a more narrow construction. We have “expressly rejected the contention that if a patent describes only a single embodiment, the claims of the patent must be construed as being limited to that embodiment.” *Liebel-Flarsheim Co. v. Medrad, Inc.*, 358 F.3d 898, 906 (Fed. Cir. 2004).

55 Brake identifies examples in the specification describing narrower embodiments of the claimed invention. But the Board must give claims their broadest reasonable interpretation consistent with the claim language and the specification. *In re Teles*, 747 F.3d at 1366. Here, a broader reading of “plurality of sensors,” to include a vehicle motion sensor, is reasonable in light of the plain language of the claims, the specification, and the overall object of the invention to “enable sensors to detect . . . potentially unsafe conditions in or around the vehicle . . . [and] to automatically control the brakes and/or other equipment” as appropriate. ’587 patent col. 4, ll. 5–11; *cf. In re Abbott Diabetes Care Inc.*, 696 F.3d 1142, 1149 (Fed. Cir. 2012) (relying on the “primary purpose” of the invention and refusing to adopt a broad construction where “the specification contains only disparaging remarks with respect to [a particular embodiment]”).¹

¹ In contrast to claims 7 and 9, claim 13 does not explicitly define a vehicle motion sensor as one of the plurality of sensors. But because claim terms are to be construed consistently throughout a patent, our reasoning above applies equally to claim 13. *See Phillips*, 415 F.3d at 1314.

III

Having found that the Board correctly construed the claims of the '587 patent, we affirm the anticipation and obviousness determinations. 55 Brake's challenge is limited to an argument that the prior art only teaches one sensor in addition to a vehicle motion sensor.² Because we agree that the claims only require two sensors, which can include a vehicle motion sensor, we see no reason to disturb the Board's determinations.

We have considered 55 Brake's remaining arguments and find them unpersuasive. Accordingly, we affirm.

AFFIRMED

² The Patent Office found claims 7–11, 13, 14, 26, 27, 29, 40, and 41 anticipated by U.S. Patent No. 5,706,909 to Bevins, J.A. 16–17, and claims 15–17, 33 and 35 obvious based on a combination of Bevins and U.S. Patent No. 5,675,190 to Morita, J.A. 26–27.