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Continental Automotive Systems, Inc. One Continental Drive Auburn Hills, MI 48326-1581			SMITH, AARON C	
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte JOSE C. SALGADO and KEYUR SHAH

Appeal 2019-003460
Application 14/515,160
Technology Center 3600

Before JENNIFER D. BAHR, MICHELLE R. OSINSKI, and
SEAN P. O’HANLON, *Administrative Patent Judges*.

BAHR, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant¹ appeals under 35 U.S.C. § 134(a) from the Examiner’s decision rejecting claims 1–3, 5–12, 14, and 17.² We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

¹ We use the term “Appellant” to refer to “applicant” as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as Continental Automotive Systems, Inc. Appeal Br. 2.

² Claims 4, 13, 15, 16, and 18–20 are canceled. *See* Amendment filed June 6, 2018; *see also* Advisory Act. dated Aug. 15, 2018 (entering the Amendment filed June 6, 2018).

THE CLAIMED SUBJECT MATTER

Claim 1, reproduced below, is illustrative of the claimed subject matter.

1. A collision avoidance system for an automotive vehicle, the collision avoidance system comprising:

a visual sensory system the visual sensory system being located inside and coupled to the automotive vehicle, the visual sensory system comprising:

a first camera located in front of a driver of the automotive vehicle and which is directed toward the driver of the automotive vehicle;

a second camera located behind the driver and which is also directed toward the driver; and

a controller coupled to both the first and second cameras;

wherein the first and second cameras and the controller are configured to determine the driver's intended forward or reverse travel direction by determining the driver's head position and the driver's eye position, the driver's head and eye positions being determined by one of the first camera and the second cameras detecting edges of the driver's lips and detecting the driver's eyes;

the controller being additionally configured to detect whether a transmission gear shift is positioned in either a forward or rearward direction, said controller preventing movement of said vehicle upon a conflict with a determined intended travel direction and the position of said driver gear shift; and

wherein said controller is additionally configured to prevent movement of said vehicle if said driver head position is in an indeterminate position that does not indicate either a forward or rearward direction.

EVIDENCE

The prior art relied upon by the Examiner is:

Name	Reference	Date
Clapper	US 6,200,139 B1	Mar.13, 2001
Larsson	US 7,460,940 B2	Dec. 2, 2008
Kameyama	US 8,131,440 B2	Mar. 6, 2012
Sun	US 2012/0288167 A1	Nov. 15, 2012
Park	US 2015/0309567 A1	Oct. 29, 2015

REJECTIONS³

- I. Claims 1–3, 5, 6, 10–12, and 14 stand rejected under 35 U.S.C. § 103 as unpatentable over Kameyama, Larsson, Clapper, and Sun.⁴
- II. Claims 7 and 17 stand rejected under 35 U.S.C. § 103 as unpatentable over Kameyama, Larsson, Clapper, Sun, and Park.
- III. Claims 8 and 9 stand rejected under 35 U.S.C. § 103 as unpatentable over Kameyama, Larsson, Clapper, and Park.

³ The Final Action contained rejections of claims 19 and 20 under 35 U.S.C. §§ 112(a), 112(b), and 103. Final Act. 4–6, 19. Appellant cancelled claims 19 and 20 in the amendment filed June 6, 2018, subsequent to the Final Action. In the Advisory Action dated August 15, 2018, the Examiner indicated that the amendment would be entered for purposes of appeal. As such, cancelled claims 19 and 20 are not involved in this appeal, and the rejections of these claims presented in the Final Action are rendered moot. *See* 37 C.F.R. § 41.31 (c) (“An appeal, when taken, is presumed to be taken from the rejection of all claims under rejection unless cancelled by an amendment filed by the applicant and entered by the Office.”).

⁴ The Examiner’s inclusion of claim 4 in the statement of this rejection on page 6 of the Final Action is presumed to be an inadvertent error, as this claim was cancelled in the amendment filed September 6, 2016, and, thus, is not involved in this appeal.

OPINION

*Rejection I – Obviousness based on Kameyama, Larsson,
Clapper, and Sun*

In contesting this rejection, Appellant presents arguments for independent claim 1 (*see* Appeal Br. 6–13), and relies on the same arguments for independent claim 10 and dependent claims 2, 3, 5, 6, 11, 12, and 14 (*see id.* at 13). We select claim 1 as representative of the claims subject to this basis for rejection, with claims 2, 3, 5, 6, 10–12, and 14 standing or falling with claim 1. *See* 37 C.F.R. § 41.37(c)(1)(iv) (permitting the Board to select a single claim to decide the appeal as to a single ground of rejection of a group of claims argued together).

The Examiner finds that Kameyama teaches most of the limitations recited in claim 1, including, in relevant part, a controller that is

configured to prevent movement of said vehicle if said driver head position is in an indeterminate position that does not indicate either a forward or rearward direction (see at least col.11, lines 15–54, particularly col.11, lines 24–28, and col.16, lines 24–28, Kameyama teaches that the system compares the most recent shift position and the face position and performs automatic accident prevention. Also, see at least col.18, lines 1–12, wherein the accident prevention restricts the movement of the vehicle. Therefore, Kameyama teaches that any head position that is directed to an arbitrary position that does not correspond to forward or reverse driving will cause the system to restrict the movement of the vehicle, wherein the arbitrary position corresponds to any “intermediate position”).

Final Act. 7–8 (boldface omitted).

Appellant argues that Kameyama does not teach or suggest a controller that is “configured to prevent vehicle motion if the driver’s head position is in an indeterminate position that does not indicate either a

forward or rearward direction,” as recited in claim 1. Appeal Br. 9. In particular, Appellant asserts that “Kameyama teaches two possible values (front or back) for all three of the variables: shift position, face direction, and obstacle existence direction . . . [and] is silent with respect to arbitrary, intermediate, and indeterminate head positions.” *Id.* at 10. According to Appellant, the Examiner “unduly broadens” Kameyama’s disclosure and relies upon impermissible hindsight. *Id.* at 12–13. We are not persuaded by these arguments.

Kameyama teaches a vehicle control system that prevents incorrect starting-off by restricting movement of the vehicle. Kameyama, 2:35–37; *see also id.*, 6:8–10 (“the control in the incorrect starting-off prevention process may be made such that the vehicle does not move at all”). In one embodiment, the system prevents vehicle movement “[w]hen the driver’s gaze direction *does not accord with* the same direction as the shift position direction and the obstacle existence direction.” *Id.*, 11:24–29 (emphasis added); *see also id.*, 4:17–19 (disclosing that the shift position may be frontward or backward). The Examiner takes the position that

one of ordinary skill in the art would recognize that any gaze direction that does not accord with the direction of the shift position would result in a dangerous situation, for example, if a driver is looking down at the floor of the vehicle or closing his/her eyes while the shift position direction is set to “forward” or “reverse.”

Ans. 19. The Examiner explains that

one of ordinary skill in the art would recognize that the gaze/face position of a human organism sitting in a vehicle is not limited to “forward” and “rearward” positions/directions, and that any number of known positons/directions that do not accord with the direction of the “shift position direction” of the

vehicle will result in a dangerous situation as taught explicitly by Kameyama.

Id. at 21. In this regard, Appellant does not persuasively refute the Examiner's position.

Appellant's contention that "Kameyama explicitly teaches that *only* the front and back directions can be used" (Reply Br. 3 (emphasis added)) is not correct. Kameyama does not teach preventing movement only when the driver gaze direction is *opposite* to the shift/obstacle direction, but, rather, as discussed above, teaches preventing movement "[w]hen the driver's gaze direction *does not accord with* the same direction as the shift position direction and the obstacle existence direction." Kameyama, 11:24–29 (emphasis added). Although Kameyama does not explicitly recite a driver gaze direction that is other than front or back, we agree with the Examiner that Kameyama does not preclude a driver from gazing in other directions. *See* Ans. 19. To the extent Appellant suggests that a driver's gaze direction which does not accord with the shift position direction can only be a direction that is opposite to the shift position direction (*see* Appeal Br. 12), any number of directions (e.g., down or sideways) would not accord with the shift position direction (i.e., front or back), thereby falling into the category of situations in which Kameyama teaches that movement should be prevented. We note that one of ordinary skill must be presumed to know something about the art apart from what a reference expressly discloses. *See In re Jacoby*, 309 F.2d 513, 516 (CCPA 1962)). As such, we are unpersuaded by Appellant's contention that the Examiner has improperly broadened the teachings of Kameyama in rejecting the claim. *See* Appeal Br. 12–13.

Moreover, Appellant does not identify, nor do we discern, any knowledge relied upon by the Examiner that was gleaned only from Appellant's disclosure and that was not otherwise within the level of ordinary skill at the time of the invention. *See In re McLaughlin*, 443 F.2d 1392, 1395 (CCPA 1971) ("Any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning, but so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made and does not include knowledge gleaned only from [Appellant's] disclosure, such a reconstruction is proper."). As such, we are unpersuaded by Appellant's contention that the Examiner relied on impermissible hindsight in reaching the determination of obviousness of the claimed subject matter. *See* Appeal Br. 13.

For the above reasons, Appellant does not apprise us of error in the Examiner's determination that the subject matter of claim 1 would have been obvious. Accordingly, we sustain the rejection of claim 1, and claims 2, 3, 5, 6, 10–12, and 14 falling therewith, under 35 U.S.C. § 103 as unpatentable over Kameyama, Larsson, Clapper, and Sun.

*Rejections II and III – Obviousness based on Kameyama,
Larsson, Clapper, Park alone, or in combination with Sun*

In contesting the rejections of independent claim 8 and dependent claims 7, 9, and 17, Appellant relies on the aforementioned arguments asserted against the rejection of independent claim 1. *See* Appeal Br. 13. For the reasons discussed above, these arguments fail to apprise us of error in the rejection of claim 1, and, likewise, fail to apprise us of error in the rejections of claims 7–9 and 17, which we sustain.

CONCLUSION

In summary:

Claims Rejected	35 U.S.C. §	References	Affirmed	Reversed
1-3, 5, 6, 10-12, 14	103	Kameyama, Larsson, Clapper, Sun	1-3, 5, 6, 10-12, 14	
7, 17	103	Kameyama, Larsson, Clapper, Sun, Park	7, 17	
8, 9	103	Kameyama, Larsson, Clapper, Park	8, 9	
Overall Outcome			1-3, 5-12, 14, 17	

AFFIRMED