The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL SCHLICK, JUERGEN HOETZEL,
UWE ZIMMERMANN, RAINER MORITZ, BERNHARD LUCAS,
TORE TOENNESEN, HERMANN WINNER, MARTIN HUEPPAUFF,
WERNER UHLER, JOACHIM BULLA, and DIRK SCHMID

Appeal 2007-2032
Application 10/275,102[1]
Technology Center 2800

Decided: June 28, 2007

Before STUART S. LEVY, LINDA E. HORNER, and DAVID B. WALKER, *Administrative Patent Judges*.

LEVY, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF CASE

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[1] Application filed May 29, 2003. The real party in interest is Robert Bosch GmbH of Stuttgart in the Federal Republic of Germany.

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 15-34. Claims 1-14 have been cancelled. (Br. 3.) We have jurisdiction under 35 U.S.C. § 6(b) (2002).

Appellant invented a control/evaluation system for a set of sensors. In particular, the system is for use in motor vehicles. (Specification 1.)

The only independent claim under appeal reads as follows:

> 15. A control and evaluation system for a set of sensor devices, comprising:
>
> at least one controller and sensor devices connected to the at least one controller in each of a plurality of areas, the at least one controller of each of the plurality of areas being connected to one another, the at least one controller being for controlling and evaluating sensor signals of the sensor devices; and
>
> at least another controller device connected to the at least one controller for performing at least one of a pre-crash function, a parking assistance function and an airbag function.

The Examiner rejected claims 15-34 under 35 U.S.C. § 102(e) as being anticipated by Gunderson.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Gunderson	US 6,642,839 B1	Nov. 4, 2003

Appellant contends (Br. 9) that

> [t]he "Gunderson" references refer to a system having a first and second stand alone sensor module connected to a display module. In particular, the "Gunderson" reference refers to a system in which sensor devices (12, 18) are connected to the controllers (400, 402). According to "Gunderson", any applications are in the stand alone modules (400, 402) (see col. 8, lines 19 to 34). The "Gunderson" reference therefore does not identically describe (or even suggest) the features of *connecting the controllers which control and evaluate*

> *signals from associated sensors to additional controllers, which realize the application functionality (whereas the first controllers do not realize such functionality*), as in claim 15 as presented, so that claim 15 is allowable.

Appellants additionally contend (Reply Br. 4) that the centralized computer system of Gunderson only refers to a central information source or display and not to another controller connected to the other controllers. It is additionally contended (*id.*) that only the processor 10 is referred to as providing a controller function in Gunderson. The Examiner contends (Answer 4) that

> the "at least one controller device connected to the at least one controller for performing at least one of a pre-crash function, a parking assistance function and an airbag function" is <u>either</u> each processor 10 of each of the plurality of sensor modules 400 being connected together as shown in at least Figs. 4 and 12, for a common function, namely, collision avoidance, or it is an additional processor or (mirco)controller or central computer – separate from the other stand alone modules (controllers) – which performs various collision-avoidance, collision warning, safety, or other processing steps. See at least col. 14, lines 23-28, or col. 14, lines 50-55, regarding the additional central computer.

The Examiner additionally contends (Answer 11) that Gunderson makes reference to a centralized computer system for a scalable, vehicle collision avoidance system. We make reference to page 11 of the Answer for the portions of Gunderson relied upon by the Examiner.

We reverse.

ISSUE

Have Appellants shown that Gunderson fails to anticipate claim 15 by showing that Gunderson fails to describe "at least another controller device

connected to the at least one controller for performing at least one of a pre-crash function, a parking assistance function and an airbag function" as recited in claim 15?

FINDINGS OF FACT

We find that the following enumerated findings are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427, 7 USPQ2d 1152, 1156 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

1. Appellants invented a control/evaluation system for a set of sensors. In particular, the system is for use in motor vehicles. (Specification 1).

From our review of Gunderson, we make the following findings of fact as to the disclosure of Gunderson:

> 2. The system includes a processor connected to a sensor and a signal interface. The processor receives signals from the sensor and the signal interface and generates a status signal based on the signals received from the sensor and the signal interface. The processor drives the status signal to the signal interface.

(Gunderson, Abstract).

3. "The present invention is related to collision avoidance systems, and more particularly to a stand alone sensor system with built in intelligence." (Gunderson, col. 1 ll. 8-10).

4. "The current collision avoidance systems are either designed as multiple sensor systems having central intelligence through an on board

computer or as single sensors with no built-in intelligence." (Gunderson, col. 2, ll. 6-9).

> 5. Signal interface 14 receives input signals and provides a means to output signals to one or more information devices such as a display module, a centralized computer system, a collision avoidance system, sensors, a data recorder such as a black box data recorder, a satellite tracking system and/or a warning system and the like.

(Gunderson, col. 5, ll. 1-6).

6. "It is understood that the signal interface provides a means to output signals to any number of devices and is not limited by the information devices listed above. In one embodiment, the information devices are wirelessly coupled to a stand alone sensor module 100." (Gunderson, col. 5, ll. 6-10).

7. "The collision avoidance system includes two stand alone sensor modules 800 and two display modules 32 and provides rear object detection." (Gunderson, col. 10, ll. 16-18).

> 8. In one embodiment, stand alone sensor module 1800 directs vehicle 1879 to stop or slow down to a predetermined speed. In another embodiment, stand alone sensor module 1800 transmits a signal to stand alone sensor module 1879 which in turn activates one or more warning lights or signs to alert vehicle 1889 of the hazard condition. In a further embodiment, stand alone sensor module 1800 activates one or more warning lights or signs to alert vehicle 1879 of the hazard condition and transmits a signal to stand alone sensor module 1833 which in turn actives one or more warning lights or signs to alert vehicle 1889 of the hazard condition.

(Gunderson, col. 13, ll. 58-col. 14, l. 2).

9. "It is understood that an information device includes any device or devices such as display modules, centralized computer systems, data recorders or 'black box', satellite tracking systems and/or a warning systems." (Gunderson, col. 14, ll. 15-18).

10. It is also understood that processor 10 of a stand alone sensor module includes any microprocessor or central processing unit containing the basic arithmetic, logic and control element for processing data. In one embodiment, processor 10 is a programmable microcontroller. In another embodiment, the programmable microcontroller is field upgradable for complete peripheral object detection about a vehicle or area to be monitored. In a further embodiment, the programmable microcontroller is compatible for operation with a centralized computer system.

(Gunderson, col. 14, ll. 19-28).

11. In one embodiment, a stand alone sensor module is scalable up to a collision avoidance system that provides full object detection about the periphery of a vehicle. In another embodiment, the collision avoidance system operates with a central computer fusing all data received from multiple sensors and providing vehicle status information.

(Gunderson, col. 14, ll. 50-55).

12. "In one embodiment, the stand alone sensor module receives signals from sensors and vehicle condition inputs and determines whether or not a hazard condition exists." (Gunderson, col. 14, ll. 56-58).

PRINCIPLES OF LAW

To anticipate a claim, a prior art reference must disclose every limitation of the claimed invention, either explicitly or inherently. *In re*

Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997). As stated in *In re Oelrich*, 666 F.2d 578, 581, 212 USPQ 323, 326 (CCPA 1981) (quoting *Hansgirg v. Kemmer*, 102 F.2d 212, 214, 40 USPQ 665, 667 (CCPA 1939)) (internal citations omitted):

> Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient. If, however, the disclosure is sufficient to show that the natural result flowing from the operation as taught would result in the performance of the questioned function, it seems to be well settled that the disclosure should be regarded as sufficient.

ANALYSIS

From our review of Gunderson, we find from Fig. 1 that processor 10 is within sensor module 100. From fact 5 we find that the information device may be a display module, a centralized computer system, a collision avoidance system, etc. Thus, we agree with the Examiner (Answer 11) that Gunderson describes connecting the sensor module, which includes the processor or microcontroller (fact 10) with a centralized computer. From fact 11, we find that Gunderson describes the stand alone sensor module to be scalable up to a collision avoidance system. From fact 11, we additionally find that "the collision avoidance system operates with a central computer fusing all data received from multiple sensors and providing vehicle status information." In addition, from the description in fact 11 of the collision avoidance system providing full object detection about the periphery of a vehicle, we find that full object detection in a vehicle collision avoidance system is broadly a teaching of a pre-crash function. From fact 8, we find that the sensor module, which includes processor 10, directs the

vehicle to stop or slow down or activate warning lights or signs. From fact 12 we find that the sensor module, which includes processor or microcontroller 10, receives inputs and determines whether or not a hazard exists. However, fusing data and providing status information is not a description of a controller connected to another controller which receives the sensor information. Rather, from the description of Gunderson, we find that the centralized computer system of Gunderson will fuse the data from the sensors and provide the information to the microcontroller in the sensor module, but Gunderson does not describe a second controller connected to the controller 10.

Thus, we find that we would have to resort to unfounded speculation to arrive at a determination that Gunderson describes, expressly or inherently, "at least another controller device connected to the at least one controller for performing at least one of a pre-crash function, a parking assistance function and an airbag function."

The examiner may not resort to speculation or unfounded assumptions to supply deficiencies in establishing a factual basis. *See In re Warner*, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA).

CONCLUSION OF LAW

On the record before us, Appellants have shown that Gunderson does not anticipate claims 15-34 as advanced by the Examiner. The rejection of claims 15-34 under 35 U.S.C. § 102(e) is reversed.

DECISION AND ORDER

The Examiner's rejection of claims 1-15 is Reversed.

REVERSED

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