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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
90/010,035	10/11/2007	6712387	ATI-207 REEX II	5266

22846 7590 07/21/2010

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EXAMINER	
KAUFMAN, JOSEPH A	
ART UNIT	**PAPER NUMBER**
3993	
MAIL DATE	**DELIVERY MODE**
07/21/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

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90/008,352	11/27/2006	6712387	ATI-207 RE	5109

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BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte AUTOMOTIVE TECHNOLOGIES INTERNATIONAL, INC.[1]
Appellant

Appeal 2010-003519
Reexamination Control 90/008,352 and 90/010,035
Patent US 6,712,387 B1[2]
Technology Center 3900

Before RICHARD E. SCHAFER, RICHARD M. LEBOVITZ and DANIEL S. SONG, *Administrative Patent Judges*.

SONG, *Administrative Patent Judge*.

DECISION ON APPEAL[3]

---

[1] Automotive Technologies International, Inc. is the real party in interest (App. Br. 3).
[2] Issued March 30, 2004 to Breed et al. (hereinafter "'387 patent").
[3] The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the "MAIL DATE" shown on the PTOL-90A cover letter attached to this decision.

The Patent Owner (hereinafter "Appellant") appeals under 35 U.S.C. §§ 134(b) and 306 (2002) from a Final Rejection of claims 1-12, 15-27 and 29-53. Claims 13, 14 and 28 have been canceled. We have jurisdiction under 35 U.S.C. §§ 134(b) and 306 (2002). The '387 patent is presently involved in the following infringement litigation proceedings (App. Br. 4):

1. Automotive Technologies International, Inc. v. American Honda Motor Co., Inc. et al., Civil Action No. 06-187-GMS (D. Del.); and

2. Automotive Technologies International, Inc. v. Hyundai Motor America, Inc. et al., Civil Action No. 06-391-GMS (D. Del.).

In addition to the Appeal Brief, the Appellant relies on the declaration under 37 C.F.R. § 1.132 of inventor Mr. David Breed. An oral hearing with the Appellant's representative was held before the Board of Patent Appeals and Interferences on July 14, 2010.

The claimed invention is directed to an arrangement for controlling deployment of a side airbag in a vehicle where the deployment is suppressed if the occupant in a seat has characteristics of a child and the head of the child is against the airbag module.

Representative independent claim 1 reads as follows (App. Br., Claims App'x.):

> 1. An arrangement for controlling deployment of a side airbag from an airbag module <u>on a side of the vehicle</u> to protect an occupant in a seat of a vehicle in a crash <u>when the occupant is present</u>, comprising

> determining means for identifying the occupant to determine whether the occupant has characteristics of a child and for determining the position of [at least a part of] the occupant relative to the airbag module, said determining means determining based on the identification of the occupant as having characteristics of a child and the position of the occupant relative to the airbag module whether the head of the child is against the airbag module, and
>
> a control circuit coupled to said determining means for controlling deployment of the side airbag based on the determined position of the [at least a part of the] occupant relative to the airbag module,
>
> said determining means comprising at least one receiver adapted to receive waves from a space above a seat portion of the seat and a processor coupled to said at least one receiver for generating a signal representative of the position of the [at least a part of the] occupant relative to the airbag module based on the waves received by said at least one receiver, said at least one receiver being capable of receiving electromagnetic waves,
>
> said control circuit being arranged to suppress deployment of the side airbag when the occupant is determined to have characteristics of a child by said determining means and the head of the child is determined to be against the airbag module by said determining means.

The Examiner rejected all of the appealed claims under 35 U.S.C. § 112, first paragraph, as failing to satisfy the written description requirement.

We REVERSE.

ISSUE

The sole issue raised in the appeal is whether the Examiner erred in finding that the Specification does not include a written description for

"identifying the occupant to determine whether the occupant has characteristics of a child," and suppressing deployment of the side airbag if the occupant has characteristics of a child and the head of the child is determined to be against the airbag module as required by the claims.

FINDINGS OF FACT

The record supports the following findings of fact (FF) by a preponderance of the evidence.

1. The BACKGROUND OF THE INVENTION section of the '387 patent states:

> A. Side impact airbag systems began appearing on 1995 vehicles. The danger of deployment induced injuries will exist for side impact airbags as they now do for frontal impact airbags. A child with his head against the airbag is such an example. The system of this invention will minimize such injuries.
> (Col. 2, ll. 29-34).
>
> B. The above applications illustrate the wide range of opportunities, which become available if the identity and location of various objects and occupants, and some of their parts, within the vehicle were known.
> (Col. 3, ll. 1-4).
>
> C. "Pattern recognition" as used herein will mean any system which processes a signal that is generated by an object, or is modified by interacting with an object, in order to determine which one of a set of classes that the object belongs to. Such a system might determine only that the object is or is not a member of one specified class, or it might attempt to assign the object to one of a larger set of specified classes, or find that it is not a member of any of the classes in the set.

(Col. 3, ll. 45-52).

D. "To identify" as used herein will mean to determine that the object belongs to a particular set or class. The class may be one containing all rear facing child seats, one containing all human occupants, all human occupants not sitting in a rear facing child seat, or all humans in a certain height or weight range depending on the purpose of the system.
(Col. 3, ll. 59-64).

2. The OBJECTS AND SUMMARY OF THE INVENTION section of the '387 states:

A. The claimed inventions are methods and arrangements for controlling deployment of a side airbag from an airbag module in a crash in which the presence and/or position of an occupant in a passenger compartment of the vehicle is determined and the deployment is controlled based thereon. The deployment can be suppressed if no occupant is present, or if the seat is occupied by, e.g., a rear-facing child seat, and a child leaning against the door. Principle objects and advantages of this invention, or other disclosed inventions, are:
(Col. 5, ll. 24-33).

B. 5. To determine the position, velocity or size of an occupant in a motor vehicle and to utilize this information to control the rate of gas generation, or the amount of gas generated, by an airbag inflater system or otherwise control the flow of gas into or out of an airbag.
(Col. 5, ll. 53-57).

C. 8. To determine the presence and/or position of occupants relative to the side impact airbag systems and to use this information to affect the operation of a side impact protection airbag system.
(Col. 6, ll. 1-4).

3. The DESCRIPTION OF THE PREFERRED EMBODIMENTS section of the '387 patent states:

> A. The use of the vehicle interior monitoring system to control the deployment of an airbag is discussed in detail in U.S. Pat. No. 5,653,462 cross referenced above. In that case, the control is based on the use of a simple pattern recognition system to differentiate between the occupant and his extremities in order to provide an accurate determination of the position of the occupant relative to the airbag. If the occupant is sufficiently close to the airbag module that he is more likely to be injured by the deployment itself than by the accident, the deployment of the airbag is suppressed. This process is carried further by the interior monitoring system described herein in that the nature or identity of the object occupying the vehicle seat is used to contribute to the airbag deployment decision. (Col. 14, ll. 27-40).
>
> B. Side impact airbags are now beginning to be used on some vehicles. These initial airbags are quite small compared to the driver or passenger airbags used for frontal impact protection. Nevertheless, a small child could be injured if he is sleeping with his head against the airbag module when the airbag therein deploys and a vehicle interior monitoring system is needed to prevent such a deployment in that event. In FIG. 9, a single ultrasonic transducer 330 is shown mounted in the vehicle door adjacent to the airbag system. This device is not used to identify, the object that is adjacent the airbag but merely to measure the position of the object. It is also understood that it can be used to determine the presence of the object, i.e., the received waves are indicative of the presence or absence of an occupant as well as the position of the occupant or a part thereof.
> (Col. 16, ll. 51-65).

PRINCIPLES OF LAW

35 U.S.C. § 112 states "[t]he specification shall contain a written description of the invention . . . ." The "test for sufficiency [under § 112] is whether the disclosure of the application relied upon reasonably conveys to those skilled in the art that the inventor had possession of the claimed subject matter as of the filing date." *Ariad Pharm., Inc. v. Eli Lilly and Co.*, 598 F.3d 1336, 1351 (Fed. Cir. 2010)(en banc). The "test requires an objective inquiry into the four corners of the specification from the perspective of a person of ordinary skill in the art. Based on that inquiry, the specification must describe an invention understandable to that skilled artisan and show that the inventor actually invented the invention claimed." *Id*. "[I]t is the specification itself that must demonstrate possession. And while the description requirement does not demand any particular form of disclosure, … or that the specification recite the claimed invention in *haec verba*, a description that merely renders the invention obvious does not satisfy the requirement." *Id*. at 1352 (citations omitted).

In addition, it is the Examiner's "initial burden [to] present [ ] evidence or reasons why persons skilled in the art would not recognize in the disclosure a description of the invention defined by the claims." *In re Wertheim*, 541 F.2d 257, 263 (CCPA 1976). Compliance with the written description requirement is a question of fact which must be resolved on a case-by-case basis. *See Vas-Cath Inc. v. Mahurkar*, 935 F.2d 1555, 1563 (Fed. Cir. 1991).

ANALYSIS

In rejecting the claims, the Examiner asserts that "there is no support in the disclosure to either identify or determine whether or not the occupant has the characteristics of a child and controlling the side airbag deployment based on the identification or determination." (Ans. 4). The Examiner further states that "while the specification does support identifying objects[,]" it does not mention the term "characteristics of a child." (Ans. 7).

The Appellant argues that the Specification of the '387 patent "describes an invention wherein waves/radiation derived from an occupying item are received and analyzed to create a signal characteristic of the occupying item with this signal being used to obtain the identity of the occupying item, and the identity then being used to control deployment of an occupant protection system." (App. Br. 16; *see also* FF 1B-1D, 2A-2C, 3A and 3B). The Appellant also argues that "the person skilled in the art would recognize that the invention is one that achieves a stated objective to prevent deployment of a side airbag for a child sleeping having his head against the airbag module and thus must not only determine the position of the child, but also that the occupying item is indeed a child, which latter feature is accomplished using a vehicle interior monitoring system as disclosed in the patent." (App. Br. 20; *see also* FF 1A, 2A and 3B).

We agree with the Appellant. In our view, the Examiner is, in essence, requiring the Specification to recite the claimed invention in *haec verba*. While the recited limitation "identifying the occupant to determine whether the occupant has characteristics of a child," may not be explicitly mentioned, the Specification is sufficiently clear that the inventors possessed

the claimed subject matter as evidenced by explicit identification of the problem of side airbag deployment causing injury to a child when the child's head is against the airbag module, and statements indicating that the described invention addresses this identified problem (FF 1A, 2A and 3B). Thus, the skilled worker would have recognized upon reading the Specification that the inventors invented the claimed step of "identifying the occupant to determine whether the occupant has characteristics of a child."

In addition, while the Examiner is correct that the described embodiment of Figure 4 pertains to a front airbag, we do not consider the distinction between front and side airbags to be dispositive, especially in view of the inventors' disclosure that "[t]he danger of deployment induced injuries will exist for side impact airbags as they now do for frontal impact airbags." (FF 1A). Furthermore, while the Examiner is also correct that Specification's disclosure relative to Figure 9 "explicitly states that the determining means does not identify the object, but merely the determines the position of the object[,]" (Ans. 5; *see also* FF 3B), this discussion of a specific illustrated embodiment does not detract from the significance of the prior sentence which states that "a small child could be injured if he is sleeping with his head against the airbag module when the airbag therein deploys and a vehicle interior monitoring system is needed to prevent such a deployment in that event." (FF 3B).

CONCLUSION

Therefore, in view of the above, our opinion is that the Examiner has not met the burden of showing why a person skilled in the art would not

recognize in the disclosure, a description of "identifying the occupant to determine whether the occupant has characteristics of a child," and suppressing deployment of the side airbag if the occupant has characteristics of a child and the head of the child is determined to be against the airbag module as claimed.

ORDER

The Examiner's rejection of claims 1-12, 15-27 and 29-53 is REVERSED.

REVERSED

ack

cc:

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