

1 UNITED STATES PATENT AND TRADEMARK OFFICE

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3  
4 BEFORE THE BOARD OF PATENT APPEALS  
5 AND INTERFERENCES  
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8 *Ex parte* DAVID S. BREED, WILBUR E. DUVALL  
9 and WENDELL C. JOHNSON  
10

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12 Appeal 2008-0437  
13 Application 10/058,706  
14 Technology Center 3600  
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17 Decided: June 20, 2008  
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20 *Before* WILLIAM F. PATE, III, JENNIFER D. BAHR and ANTON W.  
21 FETTING, *Administrative Patent Judges*.

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23 PATE, III, *Administrative Patent Judge*.

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25 DECISION ON APPEAL  
26

27 STATEMENT OF CASE

28 The Appellants appeal under 35 U.S.C. § 134 (2002) from a Final  
29 Rejection of claims 1-5, 7-21, 23 and 24. Claims 6 and 22 have been  
30 indicated to be allowable if rewritten in independent form. We have  
31 jurisdiction under 35 U.S.C. § 6(b) (2002).

1           The Appellant claims a sensor system and a method for sensing a  
2 characteristic of a vehicle occupant so that deployment of an airbag can be  
3 based on the sensed characteristic of the vehicle occupant.

4           Representative independent claim 1 reads as follows:

- 5           1.       A sensor system for sensing at least one occupant  
6 characteristic of a vehicle occupant, comprising:  
7                   means for transmitting an energy signal toward an  
8 occupant location within a vehicle;  
9                   means for detecting whether absorption of the energy  
10 signal by a vehicle occupant occurs and for providing an  
11 absorption signal indicative thereof; and  
12                   means for processing the absorption signal to determine  
13 at least one occupant characteristic.  
14

15           The other independent claims 15, 23 and 24 appealed also recite  
16 “detecting whether absorption of the energy . . . occurs” and “absorption  
17 signal” limitations.

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

19           Cooper                           US 6,199,902 B1                           Mar. 13, 2001

20  
21           The Examiner rejected claims 1-5, 7-21, 23 and 24 under 35 U.S.C.  
22 § 102(a) as lacking novelty over Cooper.

23           We AFFIRM.  
24

25   ISSUE

26           The sole issue raised in the present appeal is whether the Examiner  
27 erred in relying on Cooper as a prior art reference in view of the Appellants’  
28 claim of priority to a grandparent application.  
29

1 PRINCIPLES OF LAW

2 35 U.S.C. § 120 states that “[a]n application for patent for an  
3 invention disclosed in the manner provided by the first paragraph of section  
4 112 of this title in an application previously filed . . . shall have the same  
5 effect, as to such invention, as though filed on the date of the prior  
6 application . . . if filed before the patenting or abandonment of or  
7 termination of proceedings . . . on an application similarly entitled to the  
8 benefit of the filing date of the first application . . . .”

9 35 U.S.C. § 112, first paragraph, states that “[t]he specification shall  
10 contain a written description of the invention . . . in such full, clear, concise,  
11 and exact terms as to enable any person skilled in the art to which it pertains,  
12 . . . to make and use the same . . . .” To satisfy the description requirement,  
13 one must show “possession” of the invention by describing the claimed  
14 invention, with all its claimed limitations, using descriptive means such as  
15 words, structures, figures, diagrams, formulas, etc. *See Lockwood v.*  
16 *American Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997). While the  
17 prior application need not describe the claimed subject matter in exactly the  
18 same terms as used in the claims, the specification must contain an  
19 equivalent description of the claimed subject matter. *Id.*

20  
21 ANALYSIS

22 The Examiner rejected claims 1-5, 7-21, 23 and 24 as lacking novelty  
23 over Cooper. The Appellants’ sole argument is that Cooper is not available  
24 as a prior art reference in view of the Appellants’ claim of priority to U.S.  
25 patent application Serial No. 09/047,703 (which issued as U.S. Patent No.

1 6,039,139) through three intervening applications (App. Br. 5). The filing  
2 date of the ‘703 application predates the effective filing date of Cooper so  
3 that if the present application has the benefit of the earlier filing date,  
4 Cooper would not be a prior art reference (App. Br. 5; Ans. 3).

5 The Examiner contends that Cooper is a prior art reference because  
6 the Appellants are not entitled to the benefit of the earlier filing date of the  
7 ‘703 application as asserted (Ans. 3). In particular, the Examiner contends  
8 that the ‘139 patent (i.e., ‘703 application) does not support the recited  
9 limitations (1) “detecting whether absorption of the energy signal by a  
10 vehicle occupant occurs”; (2) “providing an absorption signal”; and (3)  
11 “processing the absorption signal to determine at least one occupant  
12 characteristic.” Thus, the Examiner concludes that the ‘139 patent fails to  
13 meet the requirements of 35 U.S.C. § 112, first paragraph, as required by  
14 35 U.S.C. § 120 (Ans. 4). We agree.

15 The Appellants initially set forth a chart with the independent claims  
16 and identify portions of the ‘139 patent that supposedly disclose, or provide  
17 support to, each of the claim limitations (App. Br. 6). However, as the  
18 Examiner correctly notes, none of the cited portions of the ‘139 patent  
19 mentions “absorption of the energy signal,” “providing an absorption signal”  
20 and/or “processing the absorption signal” (Ans. 4). In this regard, the cited  
21 portions of the ‘139 patent relate to the transducers receiving waves *reflected*  
22 off of the vehicle occupant, and to the analysis of these *reflected* waves.

23 The Appellants state that when ultrasonic waves and/or  
24 electromagnetic waves are transmitted toward water-containing objects such  
25 as an occupant of a vehicle, a portion of the waves are absorbed (App. Br.

1 8). The Appellants further state that the amount of absorption of the waves  
2 equals the amount of energy transmitted, less (i.e., minus) the amount of  
3 energy scattered and the amount of energy received (i.e., reflected) (App. Br.  
4 9). In view of this relationship between reflected and absorbed waves, the  
5 Appellants contend that detection of absorption of the waves is inherently  
6 disclosed whenever the '139 patent mentions reflectivity of waves being  
7 detected and analyzed (App. Br. 9). Thus, the Appellants conclude that  
8 detection of absorption of the waves is a feature that “flows as a matter of  
9 course from a detection of the reflected waves” disclosed in the '139 patent  
10 and that “a detection of whether absorption of a transmitted energy signal  
11 has occurred is equivalent to a detection of a reflected energy signal, and  
12 analysis thereof” (App. Br. 9).

13 We disagree with the Appellants because when the Specification of  
14 the '139 patent discusses receiving the reflected waves, only the reflected  
15 waves are detected, without regard to the energy scattered. This detection of  
16 reflected waves is not equivalent to detecting the absorption of the waves  
17 due to wave scattering which is acknowledged by the Appellants. While the  
18 occurrence of absorption of the waves may be derived or calculated based on  
19 the transmitted and reflected waves, such analysis requires determination of  
20 the extent to which the transmitted waves are also scattered. Scattering of  
21 waves is not discussed in the '139 patent. Moreover, even if absorption may  
22 be derived/calculated, such derivation or calculation of absorption is not  
23 “detecting” whether absorption has occurred as specifically recited in the  
24 claims.

1           In view of the above, we find that the '139 patent (i.e., '703  
2 application) does not provide sufficient description to establish that the  
3 Appellants were in possession of the invention now claimed. Thus, the  
4 Appellants have not shown that the Examiner erred in applying Cooper as a  
5 prior art reference in rejecting claims 1-5, 7-21, 23 and 24 as lacking  
6 novelty.

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#### CONCLUSION

9           The Appellants have not shown that the Examiner erred in applying  
10 Cooper as a prior art reference.

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#### ORDER

13           The Examiner's rejection of claims 1-5, 7-21, 23 and 24 is  
14 AFFIRMED.

15           No time period for taking any subsequent action in connection with  
16 this appeal may be extended under 37 C.F.R. § 1.136(a). *See* 37 C.F.R.  
17 § 1.136(a)(1)(iv) (2007).

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AFFIRMED

Appeal 2008-0437  
Application 10/058,706

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