

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 23

**UNITED STATES PATENT AND TRADEMARK OFFICE**

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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

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Ex parte MICHAEL LATARNIK and HELMUT FENNEL

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Appeal No. 2002-0245  
Application No. 09/202,412

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ON BRIEF

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Before COHEN, McQUADE, and NASE, Administrative Patent Judges.  
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 16 to 21, which are all of the claims pending in this application.

We REVERSE.

BACKGROUND

The appellants' invention relates to a process for controlling the driving behavior of an automotive vehicle . A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Sol et al. (Sol)	5,136,513	Aug. 4, 1992
Ammon	5,548,536	Aug. 20, 1996
Eckert et al. (Eckert)	5,862,503	Jan. 19, 1999

Claims 16 to 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Sol.

Claims 16 to 21 stand rejected under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Ammon.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 20, mailed August 13, 2001) for the examiner's complete reasoning in

support of the rejections, and to the brief (Paper No. 18, filed July 9, 2001) and reply brief (Paper No. 21, filed October 15, 2001) for the appellants' arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. Upon evaluation of all the evidence before us, it is our conclusion that the evidence adduced by the examiner is insufficient to establish a prima facie case of obviousness with respect to the claims under appeal. Accordingly, we will not sustain the examiner's rejection of claims 16 to 21 under 35 U.S.C. § 103. Our reasoning for this determination follows.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. See In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A prima facie case of obviousness is established by presenting evidence that would have led one of ordinary skill in the art to combine the relevant teachings of the references to arrive at the claimed invention. See In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988) and In re Lintner, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Claim 16, the only independent claim on appeal, reads as follows:

A process for controlling the driving behavior of an automotive vehicle provided with tire sensors that determine the measured forces ( $F_{\text{mess}}$ ) applied to the vehicle tires, comprising the steps of:

determining the measured forces applied to each vehicle tires;  
determining variable masses applied to the vehicle by converting the forces applied to each of the tires into masses and applying the variable masses to a stored mass distribution model, said mass distribution model including basic mass distribution of the vehicle, actual vehicle mass and mass point of gravity location, whereby the addition of the variable masses is to variable loading sites within the mass distribution model; and

determining the variable center of gravity, the yaw rate and the side slip angle of the vehicle using the mass distribution model and controlling the driving behavior of the vehicle based on the determined variable center of gravity, the determined yaw rate and the determined side slip angle.

### **The obviousness rejection based on Eckert and Sol**

We will not sustain the rejection of claims 16 to 21 under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Sol.

In this rejection, the examiner ascertained (answer, p. 3) that Eckert does not specifically teach determining a variable center of gravity. The examiner then determined (answer, p. 4) that it would have been obvious to one skilled in the art at the time of the invention to modify the system of Eckert "by incorporating the features from the center of gravity estimator if [sic, of] Sol" because such modification will optimize active braking effort and traction control action as suggested by Sol.

The appellants argue (brief, pp. 8 and 10) that the claimed step of "determining the measured forces applied to each vehicle tires" is neither taught or suggested by either Eckert or Sol. In addition, the appellants assert (brief, pp. 9-10; reply brief, pp. 2-3) that there is no motivation to combine Eckert and Sol to arrive at the subject matter of claim 16. We agree.

The examiner has not pointed out where the step of "determining the measured forces applied to each vehicle tires" is met by Eckert or Eckert as modified with a center of gravity estimator as taught by Sol. Our review of Eckert does not reveal any teaching or suggestion that Eckert discloses determining the measured forces applied to each vehicle tire. As such, even if it would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify Eckert with a center of gravity estimator as taught by Sol, such would not have arrived at the claimed subject matter. Moreover, it is not apparent that the teachings of Eckert as modified by Sol as set forth in the rejection would have met the step of determining variable masses applied to the vehicle by converting the forces applied to **each** of the tires into masses and applying the variable masses to a stored mass distribution model as set forth in claim 16.

For the reasons set forth above, the decision of the examiner to reject claims 16 to 21 under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Sol is reversed.

**The obviousness rejection based on Eckert and Ammon**

We will not sustain the rejection of claims 16 to 21 under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Ammon.

In this rejection, the examiner ascertained (answer, p. 4) that Eckert does not specifically teach determining a variable center of gravity. The examiner then determined (answer, p. 6) that it would have been obvious to one skilled in the art at the time of the invention to modify the system of Eckert "by incorporating the features from the method of Ammon" because such modification will improve the behavior of the vehicle as suggested by Ammon.

The appellants argue (brief, pp. 11-12; reply brief, pp.3-4) that Ammon does not teach or suggest determining a variable center of gravity as recited in claim 16 and therefore the combined teachings of Eckert and Ammon would not have arrived at the subject matter of claim 16. We agree.

The examiner has not pointed out where the step of determining a variable center of gravity is suggested or taught by Ammon. Our review of Ammon does not reveal any teaching or suggestion that Ammon determines a variable center of gravity. Thus, even if it would have been obvious at the time the invention was made to a person of ordinary skill in the art to modify Eckert with "the features from the method of Ammon" such would not have determined a variable center of gravity and therefore would not have arrived at the subject matter of claim 16.

For the reasons set forth above, the decision of the examiner to reject claims 16 to 21 under 35 U.S.C. § 103 as being unpatentable over Eckert in view of Ammon is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 16 to 21 under 35 U.S.C. § 103 is reversed.

REVERSED

IRWIN CHARLES COHEN  
Administrative Patent Judge

JOHN P. McQUADE  
Administrative Patent Judge

JEFFREY V. NASE  
Administrative Patent Judge

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