

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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 DENNIS A. KRAMER, FREDERICK A. JELLEY, JOSEPH A. KAY, JAMES R. BRICHTA, DENNIS G. O'REILLY, CHRISTOPHER S. KEENEY and JAEHO KWAK

Appeal No. 2006-0168
Application No. 10/459,052

ON BRIEF

Before OWENS, CRAWFORD, and LEVY, Administrative Patent Judges.
CRAWFORD, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 6, 8, 9 and 13 to 17.

The appellants' invention relates to a brake system for a motor vehicle (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.

The prior art

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

Testardi	5,067,778	Nov. 26, 1991
Schenk et al. (Schenk)	5,090,518	Feb. 25, 1992
Suzuki	5,957,246	Sep. 28, 1999
Akuta	JP 03061728	Mar. 18, 1991

The rejections

Claims 1, 2, 4, 8, 9, 13 and 15 to 17 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schenk in view of Suzuki.

Claims 3 and 14 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schenk and Suzuki further in view of Akuta.

Claims 5 and 6 stand rejected under 35 U.S.C. § 103 as being unpatentable over Schenk, Suzuki and further in view of Testardi.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejections, we make reference to the answer (mailed June 30, 2005) for the examiner's complete reasoning in support of the rejections, and to the brief (filed April 29, 2005) and reply brief (filed August 26, 2005) 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. As a consequence of our review, we make the determinations which follow.

We turn first to the examiner's rejection of claims 1, 2, 4, 8, 9, 13 and 15 to 17 under 35 U.S.C. § 103 as being unpatentable over Schenk in view of Suzuki. The examiner finds that Schenk describes the invention as claimed except that Schenk does not describe a brake pad wear compensation and specifically the use of a position sensor for sensing the position of the brake pad relative to the braking surface. The examiner relies on Suzuki for teaching a brake system that utilizes a position sensor that provides information to a controller when adjusting the brake pad position due to excessive pad wear. The examiner concludes:

It would have been obvious to one of ordinary skill in the art to have provided the brake system of Schenk et al. with a position sensor for sensing a worn position of the brake pad relative to the braking surface as taught by Suzuki, thus allowing for compensation due to pad wear resulting in improved safety and operation of the vehicle [answer at pages 3 to 4].

Appellants argue that Suzuki does not disclose a control unit that evaluates whether the position sensed by the position sensor will allow the first brake pad to apply a braking force to a first side of said braking surface *when the energy receptive material is expanded.*

We agree with the examiner that Suzuki describes a brake system utilizing a position sensor that provides information to a controller when adjusting the brake pad position due to excessive pad wear. The pad clearance taught by Suzuki is the position

of the brake pad relative to the braking surface. The controller evaluates the effectiveness of the brake from a first position, and moves the brake to a second position if necessary to effect proper brake actuation. However, we agree with the appellants that Suzuki does not describe a control unit that instructs a drive unit to move an energy receptive material to a second position if it is sensed that the brake pad will not apply a braking force *when the energy receptive material is expanded*. Suzuki does not describe anything about evaluating whether the braking force to a brake surface will allow the brake pad to apply a braking force when an energy receptive material is expanded.

In view of the foregoing, we will not sustain the rejection as it is directed to claim 1 and claims 2 and 4 dependent thereon.

Claim 8 recites selectively driving a drive unit to move the position of a brake pad if it is sensed that the brake pad will not apply a brake force to the braking surface when the energy receptive material is expanded. As such, claim 8 requires determining if the brake force will apply a braking force to the brake surface when the energy receptive material is expanded. As Suzuki does not describe determining whether a brake pad will apply a braking force when the energy receptive material is expanded, we will not sustain this rejection as it is directed to claim 8. We will also not sustain the rejection as it is directed to claims 9, 13 and 15 as these claims are dependent on claim 8.

The remaining rejections rely on the combination of the teachings of Schenk and Suzuki to suggest evaluating whether a brake pad will apply a braking force to a brake surface when an energy receptive material is expanded. Therefore, we will not sustain these rejections.

The decision of the examiner is reversed.

TERRY J. OWENS)
Administrative Patent Judge)
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MURRIEL E. CRAWFORD) BOARD OF PATENT
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Comment [jvn1]: Type address

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