

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte PHILIPPE BOICHOT and REGIS KIRAT

Appeal No. 1999-1054
Application No. 08/889,594

HEARD: February 9, 2000

Before McCANDLISH, ***Senior Administrative Patent Judge***, ABRAMS
and BAHR, ***Administrative Patent Judges***.

ABRAMS, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is an appeal from the decision of the examiner finally rejecting claims 1-8, which constitute all of the claims of record in the application.

The appellants' invention is directed to an improvement in semi-active suspension systems. The claims on appeal have been reproduced in an appendix to the Brief.

THE REFERENCES

The references relied upon by the examiner to support the final rejection are:

Karnopp	5,024,302	Jun. 18,
1991		
French Patent (Renault)	2,660,705	Oct. 11,
1991 ¹		

THE REJECTIONS²

Claims 1 and 3 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Renault.

Claims 2, 4 and 5-8 stand rejected under 35 U.S.C. § 103 as being unpatentable over Karnopp in view of Renault.

¹Our understanding of this reference has been obtained from a PTO translation, a copy of which is enclosed.

²A rejection of claims 1-8 under the judicially created doctrine of obviousness-type double patenting was alleviated by the filing of a terminal disclaimer. A rejection of claims 2 and 4 under 35 U.S.C. § 112, second paragraph, was withdrawn by the examiner in the Answer.

Rather than attempt to reiterate the examiner's full commentary with regard to the above-noted rejection and the conflicting viewpoints advanced by the examiner and the appellants regarding the rejection, we make reference to the Examiner's Answer (Paper No. 10) and the Appellants' Brief (Paper No. 8).

OPINION

The appellants' invention relates to controlling hydraulic dampers such as the shock absorbers used on vehicles. These damper systems typically comprise a piston slidable in a cylinder and defining within the cylinder first and second chambers in which there is damping fluid. Flow actuating means operated by a control circuit are provided for controlling the replenishment and evacuation of the damping fluid from the chambers. According to independent claim 1, the appellants' improvement comprises a direct control loop in the control circuit that in turn comprises an inverse model of the damper, "means for supplying a generated reference force signal" to the inverse model, and a speed feedback loop for supplying a signal of measured relative speed to the inverse model, wherein means responsive to the generated reference force signal and the

signal of measured relative speed supplies a control signal to the flow actuating means to thereby control the damping force on the actuator which is in opposition to the said force signal and speed signal.

The Rejection Under 35 U.S.C. § 102(b)

Independent claim 1 and dependent claim 3 stand rejected as being anticipated by Renault. Anticipation is established only when a single prior art reference discloses, either expressly or under the principles of inherency, each and every element of the claimed invention. See, for example, ***In re Paulsen***, 30 F.3d 1475, 1480-1481, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994) and ***In re Spada***, 911 F.2d 705, 708, 15 USPQ2d 1655, 1657 (Fed. Cir. 1990).

The appellants have admitted that all of the subject matter recited in the preamble to claim 1 is found in Renault (Brief, page 7). They also have conceded that "most of the structural content within appealed independent claim 1 has counterpart basis within the Renault patent" (Brief, page 8). They argue, however, that the claimed controls are very different in that

[t]he inputs for the inverse model (15) in Appellant's invention are the speed sensor feedback y and the reference force F_c . In Renault's patent the inputs are speed sensor feedback and force sensor feedback (Brief, page 12, emphasis added).

That is, in the appellants' invention the signal generated in the inverse model to control the damping utilizes a reference force signal rather than an indication of the actual force sensed at the actuator (although a signal related to the actual force may be added downstream), whereas the Renault system utilizes the actual force signal in the inverse model portion of the control system. The practical effect of this, according to the appellants, is that a failure of the means for supplying the actual force signal does not cause the actuator damping system to fail, for the reference signal is still present, although a slight error may result (Brief, pages 4 and 16).

Renault therefore fails to disclose or teach one of the elements of claim 1, and thus cannot be anticipatory of the claim. The rejection of claims 1 and 3 is not sustained.

The Rejection Under 35 U.S.C. § 103

Claims 2, 4 and 5-8 stand rejected as being unpatentable over the combined teachings of Karnopp and Renault. Claim 2 adds an accumulator to claim 1. It is the examiner's position

that Karnopp discloses all of the subject matter recited in claim 2 except for the control system, which is taught by Renault, and that it would have been obvious to have provided the Karnopp system with "the improved control of Renault" (Answer, page 4). The test for obviousness is what the combined teachings of the prior art would have suggested to one of ordinary skill in the art. See, for example, **In re Keller**, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). In establishing a *prima facie* case of obviousness, it is incumbent upon the examiner to provide a reason why one of ordinary skill in the art would have been led to modify a prior art reference or to combine reference teachings to arrive at the claimed invention. See **Ex parte Clapp**, 227 USPQ 972, 973 (Bd. Pat. App. & Int. 1985). To this end, the requisite motivation must stem from some teaching, suggestion or inference in the prior art as a whole or from the knowledge generally available to one of ordinary skill in the art and not from the appellants' disclosure. See, for example, **Uniroyal, Inc. v. Rudkin-Wiley Corp.**, 837 F.2d 1044, 1052, 5 USPQ2d 1434, 1439 (Fed. Cir.), *cert. denied*, 488 U.S. 825 (1988).

Dependent claim 2 includes, of course, all of the subject matter recited in claim 1. As we concluded above in discussing the rejection of claim 1 as being anticipated by Renault, this reference fails to disclose all of the subject matter of claim 1. Our view on that matter is not altered by considering Renault in the light of the guidance provided by our reviewing court with respect to the matter of obviousness. That is, not only does Renault not teach providing means for supplying a generated reference force signal to the inverse model, but no suggestion is seen which would have motivated one of ordinary skill in the art to modify Renault to do so. This deficiency is not cured by considering the teachings of Karnopp.

The rejection of claim 2 therefore is not sustained. Nor, it follows, will we sustain the rejection of claims 4 and 5-8, which depend from claim 2.

SUMMARY

Neither rejection is sustained.

The decision of the examiner is reversed.

REVERSED

HARRISON E. McCANDLISH)	
Senior Administrative Patent Judge)	
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)	BOARD OF PATENT
NEAL E. ABRAMS)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JENNIFER D. BAHR)	
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