

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. 17

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte GALE C. BANKS, III

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Appeal No. 2002-1827  
Application No. 09/428,594

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HEARD: February 19, 2003

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Before ABRAMS, STAAB, and NASE, Administrative Patent Judges.  
ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-13, which are all of the claims pending in this application.

We REVERSE.

### BACKGROUND

The appellant's invention relates to an exhaust scavenging system for an internal combustion engine. An understanding of the invention can be derived from a reading of exemplary claim 1, which appears in the appendix to the appellant's Brief.

The single prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

McManus	5,678,404	Oct. 21, 1997
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Claims 1-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by McManus.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellant regarding the above-noted rejection, we make reference to the Answer (Paper No. 10½) for the examiner's complete reasoning in support of the rejection and to the Brief (Paper No. 10) and Reply Brief (Paper No. 12) for the appellant's arguments thereagainst.

### OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. As a consequence of our review, we make the determinations which follow.

Independent claim 1 recites the appellant's exhaust gas scavenging invention as comprising at least three exhaust passages extending from the engine, each including an outlet, the outlets being equidistant from a common center line and terminating "substantially in an outlet plane, the exhaust passage outlets defining a center space thereamong," a collector interfacing with the exhaust passages at a transition collector portion, and

a flow enhancement element in sealed arrangement with the exhaust passages at the outlet plane to close the center space and extending in an extended position along the common center line into the transition collector portion.

It is the examiner's view that all of the subject matter recited in the claims is anticipated<sup>1</sup> by McManus. This reference is directed to a variable tuned exhaust system for an internal combustion engine. The examiner focuses on the embodiment shown in Figures 2A and 2B, with regard to which the examiner finds that McManus discloses "a flow enhancement element (16, 24, 25) in sealed arrangement with the exhaust passages at the outlet plane to close the center space and extending solely from the center space into the transition collector portion (lines 64-67 of column 3)." The appellant argues in rebuttal that the reference does not support the conclusion that the center space in the McManus device is closed and, even if that were considered to

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<sup>1</sup> 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).

be the case, there is no disclosure or teaching that the flow enhancement element is “in sealed arrangement with the exhaust passages at the outlet plane to close the center space,” as is required by all of the independent claims.

We find ourselves in agreement with the appellant that the rejection is defective, and we therefore will not sustain it. From our perspective, the representation of the McManus invention provided in Figures 2A and 2B does not establish that the center space between the four exhaust gas passages is closed at all, much less that it is closed at the plane in which the outlets of the gas passages are located. The specification does not provide further information on this point and, in this regard, the passage in lines 64-67 of column 3, to which the examiner refers for support, states only that the passages are joined together, but is silent as to whether this is accomplished in such a fashion as to close the center space. Furthermore, even if one were to agree with the examiner’s conclusion that the center space must be closed, which has not been supported by any evidence, there is no teaching in McManus that the movable element closes it at the outlet plane of the exhaust gas passages. It could, for example, be closed at some other point, such as where exhaust passages 16 enter the upstream end of collector 11, or elsewhere between the upstream end of the collector and the plane of the exhaust gas passage outlets. It therefore is mere speculation to conclude on the basis of the evidence adduced by the examiner that this requirement of the claim is anticipated by the reference.

Since the limitation discussed above is present in all four of the independent claims, McManus fails to disclose or teach all of the subject matter recited in the claims, and the rejection cannot be sustained.

CONCLUSION

The rejection is not sustained.

The decision of the examiner is reversed.

NEAL E. ABRAMS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
	)	BOARD OF PATENT
LAWRENCE J. STAAB	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
	)	
JEFFREY V. NASE	)	
Administrative Patent Judge	)	

NEA:pgg  
JOHN D. McCONAGHY  
47<sup>TH</sup> FLOOR  
633 WEST FIFTH STREET  
LOS ANGELES, CA 90071-2066