

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 36

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TSUGUNORI KONAKAWA

Appeal No. 95-4616
Application 08/200,932¹

ON BRIEF

Before CALVERT, MEISTER and ABRAMS, Administrative Patent Judges.

ABRAMS, Administrative Patent Judge.

DECISION ON APPEAL

The following claims of record in this application are before us on appeal:
10-18, 24, 26-28, 33, 34, 49-53, 58-66, 73-79, 81-89, 93-98 and 105.

The appellant's invention is directed to a reed type valve arrangement for a reciprocating machine. The subject matter before us on appeal is illustrated by reference to claim 10, which can be found in an appendix to the Appeal Brief.

¹ Application for patent filed February 22, 1994. According to the appellant, the application is a continuation of Application 07/994,931, filed December 22, 1992, abandoned.

THE REFERENCES

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

Curtis <i>et al.</i> (Curtis)	4,905,638	Mar. 6, 1990
Weed	4,928,636	May 29, 1990
Japanese Patent Publication	2-61321	Mar. 1, 1990

THE REJECTIONS

Claim 105 stands rejected under 35 U.S.C. § 102(b) as being clearly anticipated by the Japanese reference.²

Claims 10-18, 24, 26-28, 33, 34, 49-53 and 58-66 stand rejected under 35 U.S.C. § 103 as being unpatentable over the Japanese reference.

Claims 81-83 stand rejected under 35 U.S.C. § 103 as being unpatentable over Curtis.³

Claims 84-89 and 93-98 stand rejected under 35 U.S.C. § 103 as being unpatentable over Curtis in view of Weed.⁴

The rejections are explained in the revised Examiner's Answer.

² The appellant cited this Japanese reference immediately prior to the final rejection, and it was applied in a rejection made for the first time in the Examiner's Answer. In anticipation of its use, the appellant provided arguments regarding it in the Brief.

³ Claims 82 and 83 inadvertently were not included in the statement of rejection as recited in the revised Answer.

⁴ Claims 93-98 were inadvertently not included in the statement of the rejection as recited in the Revised Answer.

The opposing viewpoints of the appellants are set forth in the substitute Appeal Brief.

OPINION

After consideration of the positions and arguments presented by both the examiner and the appellant, we have concluded that none of the rejections should be sustained. Our reasons for this decision follow.

The Rejection of Claim 105

This claim stands rejected as being anticipated by the Japanese reference. 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 *In re Paulsen*, 30 F.3d 1475, 1480-1481, 31 USPQ2d 1671, 1675 (Fed. Cir. 1994). The Japanese reference discloses first and second caging members, as required by the claim. However, the claim further specifies that the second caging member be “attachably affixed to the first caging member,” which is not disclosed by the reference, in which second caging member 20 is attached to base 30, and not to first caging member 10 (see Figure 2).

This being the case, each and every limitation of the claim is not disclosed in the reference, and the anticipation rejection cannot be sustained.

The Rejection of Independent Claim 10

Independent claim 10 stands rejected as being unpatentable over the Japanese reference. 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 *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). The appellant has argued that the structure recited in the last five lines of this claim is not present in the reference, and we agree.

The cited portion of the claim requires that each caging member have a plurality of valved openings, and than one of the caging members have a lesser number of valved openings than the other (see Figure 6, for example). Such is not the case with the caging members disclosed in the Japanese reference, where both have the same number of valved openings. We are not persuaded by the examiner's assertion that the number of openings would have been an obvious expedient to one of ordinary skill in the art, in the face of the appellant's discussions regarding his objective of providing a fuel mixture with certain desirable characteristics which improve the operation of the engine (specification, pages 3-5; substitute Brief, pages 4-8).

It therefore is our conclusion that the teachings of the Japanese reference fail to establish a *prima facie* case of obviousness with regard to the subject matter recited in claim 10. Thus, we will not sustain the rejection of independent claim 10 or, it follows, of claims 11-18, 24 and 26-28, which depend therefrom.

The Rejection of Independent Claim 33

This claim also stands rejected as being unpatentable over the Japanese reference. As was the case with claim 105, claim 33 requires that the second caging member be detachably affixed to the first caging member, a construction which is not disclosed by the reference. Nor, in our view, would one of ordinary skill in the art have found suggestion in the reference to modify it so that it meets this requirement of the claim, absent the hindsight accorded one who first viewed the appellant's disclosure.

This claim also recites a pair of induction passages serving the engine through the reed valve arrangement. The reference merely discloses "a suction gas passage (B)," and is further silent as to its construction. It is the examiner's position that the use of two-barrel carburetors is well known, and therefore it would have been obvious to provide two induction passages to the intake system of the Japanese reference. We do not agree, in that we fail to perceive any suggestion which would have motivated one of ordinary skill in the art to make such a modification to the Japanese structure, absent hindsight.

The rejection of independent claim 33 and dependent claim 34 is not sustained.

The Rejection of Independent Claim 49

The Japanese reference also forms the basis for the Section 103 rejection of claim 49. This claim requires that the second caging member be detachably secured to the first, and therefore this rejection cannot be sustained for the same reason as we expressed above with regard to claims 105 and 33. In addition, like claim 33, claim 49

requires a pair of flow passages extending through the reed valve arrangement and communicating with the caging members, which is not shown or suggested by the Japanese reference.

The rejection of independent claim 49 and dependent claims 50-53, 58-66 and 73-79 is not sustained.

The Rejection of Independent Claim 81

This claim has been rejected as being unpatentable over Curtis, which is directed to a two stage carburetor for a two-stroke engine. The claim requires “a caging member defining a flow chamber,” at least one valve opening communicating with the flow chamber, and a pair of flow passages communicating with the flow chamber. Curtis discloses a pair of flow chambers (14 and 16). However, unlike the appellant’s system in which both flow passages communicate with a single flow chamber defined by the caging members, it is basic to the Curtis invention that each flow passage communicate with a separate flow chamber defined by a separate caging member (column 1, lines 53-56). It therefore is our view that the Curtis system differs from the claimed system in that it does not disclose or teach supplying a single flow chamber by means of two flow passages.

In addition, Curtis fails to disclose rectangular valved openings being used in concert with flow passages of circular cross-section, which is required by this claim. While the examiner is of the view that these limitations would have been matters of

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engineering choice, the appellant argues otherwise. In the appellant's invention the components of the intake system are designed in such a manner as to provide the particular advantages recited in the opening pages of the specification. Therefore in the absence of evidence supporting the examiner's position, we are not persuaded that this combination of features would have been obvious.

The rejection of independent claim 81 and dependent claims 82 and 83 is not sustained.

The Rejection of Claim 84 et al.

Claims 84-89 and 93-98, all of which are dependent from claim 81, stand rejected as being unpatentable over Curtis in view of Weed, the latter being cited for its teaching of forming the fingers of the multiple reed valves integral with one another. Be that as it may, the deficiencies in the teachings of Curtis that resulted in the demise of the rejection of claim 81 are not cured by Weed. This being the case, the rejection of these claims is not sustained.

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SUMMARY

None of the rejections are sustained.

The decision of the examiner is reversed.

REVERSED

IAN A. CALVERT
Administrative Patent Judge

JAMES M. MEISTER
Administrative Patent Judge

NEAL E. ABRAMS
Administrative Patent Judge

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Ernest A. Beutler

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