

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. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte TSUNEKAZU UDAGAWA

Appeal No. 2000-0203
Application No. 08/924,099

ON BRIEF

Before FRANKFORT, STAAB, and McQUADE, Administrative Patent Judges.

McQUADE, Administrative Patent Judge.

DECISION ON APPEAL

Tsunekazu Udagawa originally took this appeal from the final rejection of claims 1, 2 and 7 through 9, all of the claims pending in the application. Upon reconsideration, the examiner has since allowed claim 9 (see page 2 in the examiner's answer, Paper No. 13). Thus, the appeal as to

Appeal No. 2000-0203
Application No. 08/924,099

claim 9 is hereby dismissed, leaving for review the standing rejection of claims 1, 2, 7 and 8.

THE INVENTION

The invention relates to a cylinder head gasket which is defined in representative claim 1 as follows:

1. A metal laminate gasket for an internal combustion engine having at least one hole to be sealed, comprising:

a first metal plate having a base portion extending substantially throughout an entire area of the gasket, a first hole corresponding to the hole of the engine and situated in the base portion, a curved portion extending from the base portion to define the first hole, and a flange extending from the curved portion in a direction away from the first hole to be situated on a part of the base portion and having an outer edge, said flange, said curved portion and a part of said base portion around the first hole constituting a main sealing portion without substantial elasticity,

a second metal plate laminated over the base portion of the first plate to be located on a same side as the flange and having a second hole and an edge portion around the second hole, the diameter of the second hole being larger than the diameter of the first hole so that when the first and second plates are assembled, an annular space is formed between the outer edge of the flange and the edge portion of the second metal plate, and

an auxiliary sealing member formed of a non-metallic elastic material and located in the space to directly contact the outer edge of the flange and the edge portion of the

Appeal No. 2000-0203
Application No. 08/924,099

second metal plate so that the auxiliary sealing member is not directly exposed to the hole of the engine by means of the main sealing portion, the thickness of the auxiliary sealing member being greater than the thicknesses of the flange and the second metal plate to project outward from the flange and the second metal plate upon assembly of the gasket so that when the gasket is tightened, the main sealing portion is substantially non-resiliently compressed to seal around the hole and the auxiliary sealing member is strongly compressed in the annular space defined by the flange and the second metal plate to resiliently seal around the hole.

THE PRIOR ART

The references relied on by the examiner as evidence of obviousness are:

Jelinek	3,930,656	Jan. 6, 1976
Udagawa et al. (Udagawa)	5,054,795	Oct. 8, 1991

THE REJECTION

Claims 1, 2, 7 and 8 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Udagawa in view of Jelinek.

Attention is directed to the appellant's brief (Paper No. 12) and to the examiner's final rejection and answer (Paper Nos. 8 and 13) for the respective positions of the appellant and the examiner with regard to the merits of this rejection.

DISCUSSION

Udagawa, the examiner's primary reference, discloses a metal laminate gasket for an internal combustion engine. As described by Udagawa, the gasket embodiment 30 shown in Figure

3

comprises a main plate 31 extending throughout an entire area of the gasket, and a pressure regulation plate 32 situated above the main plate 31. The main plate 31 includes a flat base portion 33, a curved portion 34 extending upwardly from the base portion 33, and a flange 35 extending from the curved portion 34 to be situated above the base portion 33. The curved portion 34 has resiliency and forms an opening 36, through which a piston (not shown) of an engine reciprocates.

Situated between the base portion 33 and the flange 35 adjacent to the curved portion 34 is a space 37. Since the space 37 is formed between the flange 35 and the base portion 33, when the gasket 30 is tightened, the flange 35 can be pushed toward the base portion 33. The flange 35, therefore, receives sealing action by resiliency of the curved portion 34 retained by the space 37. The sealing pressure is basically obtained by the curved portion 34 and the space 37.

As shown in FIG. 3, an outer periphery 38 of the flange 35 is located above the base portion 33. Consequently, when the gasket 30 is tightened, the flange 35 is supported by the curved portion 34 and the outer periphery 38 situated above the base portion 33. The resiliency of the curved portion 34 is slightly increased by this structure.

The pressure regulation plate 32 includes a hole 39 larger than the outer periphery 38 of the flange

Appeal No. 2000-0203
Application No. 08/924,099

35 and is placed above the base portion 33. The pressure regulation plate 32 does not directly nor indirectly lay over the flange 35 [column 2, line 50, through column 3, line 12].

It is not disputed that Udagawa's gasket responds to all of the limitations in claim 1 except for those relating to the auxiliary sealing member. The Udagawa gasket has no such member. Jelinek discloses a sealing gasket construction that can be used, for example, between the cylinder head and cylinder block of an internal combustion engine. In general, the construction "comprises a part of relatively rigid material, such as metal or plastic, and a part of relatively readily deformable material such as rubber or other elastomeric material" (column 1, lines 50 through 53). The part of relatively rigid material takes the form of a plate having recesses therein for receiving the parts of relatively readily deformable material which fill the recesses and project upwardly therefrom so as to be deformed into sealing engagement with an opposing surface when the joint containing the gasket is tightened.

In proposing to combine Udagawa and Jelinek to reject claim 1, the examiner concludes that it would have been obvious to one of ordinary skill in the art at the time the

Appeal No. 2000-0203
Application No. 08/924,099

invention was made "to add the auxiliary [elastomeric] sealing member as disclosed by Jelinek into the space of the gasket [between the flange periphery 38 and the pressure regulation plate 32] as disclosed by Udagawa et al. for better sealing" (final rejection, page 3).

This reference combination is reasonable on its face. Jelinek's teaching that sealing is facilitated by the use of elastomeric sealing members filling and projecting upwardly from recesses in a rigid base plate (see, for example, column 2, lines 37 through 40) would have provided the artisan with ample suggestion or motivation to add such an elastomeric sealing member to Udagawa's gasket in the recess or space between the periphery 38 of flange 35 and the pressure regulation plate 32, thereby arriving at the subject matter recited in claim 1. For the most part, the appellant's contention that the rejection is unsound rests on the individual deficiencies of Udagawa and Jelinek with respect to the claimed invention. Non-obviousness cannot be established, however, by attacking references individually where the rejection is based upon the teachings of a

Appeal No. 2000-0203
Application No. 08/924,099

combination of references. In re Merck & Co., Inc., 800 F.2d 1091, 1097, 231 USPQ 375, 380 (Fed. Cir. 1986). The appellant also argues that, within the context of the proposed reference combination, the elastomeric sealing members disclosed by Jelinek "are not proper and can not provide the sufficient elasticity in the invention" (brief, page 8). It is not apparent, however, nor has the appellant cogently explained, why sealing members of the sort disclosed by Jelinek lack response to the sealing member limitations recited in claim 1.

In light of the foregoing, the combined teachings of Udagawa and Jelinek justify the examiner's conclusion that the differences between the subject matter recited in claim 1 and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art. Therefore, we shall sustain the standing 35 U.S.C. § 103(a) rejection of claim 1 as being unpatentable over Udagawa in view of Jelinek.

We also shall sustain the standing 35 U.S.C. § 103(a) rejection of dependent claims 2, 7 and 8 as being unpatentable over Udagawa in view of Jelinek since these claims stand or

Appeal No. 2000-0203
Application No. 08/924,099

fall with parent claim 1 in accordance with the claim grouping and substantive arguments set forth in the appellant's brief.

SUMMARY

The appeal as to claim 9, which has been allowed by the examiner, is dismissed; and the decision of the examiner to reject claims 1, 2, 7 and 8 is affirmed.

No period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

CHARLES E. FRANKFORT)	
Administrative Patent Judge)	
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)	BOARD OF PATENT
LAWRENCE J. STAAB)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
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JOHN P. McQUADE)	
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Appeal No. 2000-0203
Application No. 08/924,099

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Appeal No. 2000-0203
Application No. 08/924,099

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APJ STAAB

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AFFIRMED

January 28, 2002