

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* MASAO KORIYAMA

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Appeal 2008-0214  
Application 10/708,560  
Technology Center 3700

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Decided: August 6, 2008

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Before MURRIEL E. CRAWFORD, DAVID B. WALKER, and  
JOHN C. KERINS, *Administrative Patent Judges*.

KERINS, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Masao Koriyama (Appellant) seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1-8, all of the claims pending in the application. We have jurisdiction under 35 U.S.C. § 6(b) (2002). An oral hearing in this appeal was held on June 19, 2008, with Ernest A. Buetler, Esq., appearing on behalf of Appellant.

## SUMMARY OF DECISION

We AFFIRM-IN-PART.

### THE INVENTION

Appellant's invention is a cylinder block for an internal combustion engine, in which a communication passage of a pump-receiving section of the block has an upper wall that is inclined upwardly (relative to a cylinder bore formed in the block) from the pump-receiving section toward the upper portion of the cylinder block. This upward inclination is provided to facilitate casting of the block without formation of unwanted metal voids.

Claims 1, 4, and 5, reproduced below, are representative of the subject matter on appeal:

1. A cylinder block for an internal combustion engine having a lower, crankcase receiving portion and an upper, cylinder head receiving portion, at least one cylinder bore formed therein extending between said lower and upper portions and surrounded at least in part by a coolant jacket, and a pump receiving portion formed at one side of said cylinder block and having a communication passage communicating with said cooling jacket formed in said cylinder block, said communication passage having an upper wall that in [*sic.*, is] inclined upwardly relative to said cylinder bore from said pump receiving portion toward the upper portion of said cylinder block to facilitate casting of said cylinder block without the formation of unwanted metal voids.

4. A cylinder block as set forth in claim 1, further including a pair of axially extending reinforcing

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ribs each extending transversely outwardly from a central portion of a respective side of the cylinder block.

5. A cylinder block as set forth in claim 1, wherein the cylinder block forms a plurality of axially spaced cylinder bores and further including a plurality of reinforcing ribs formed on opposite sides of said cylinder block each of which is aligned with the axis of a respective one of said cylinder bores.

#### THE REJECTION

The Examiner relies upon the following as evidence of unpatentability:

Inoue

US 2002/0062795 A1

May 30, 2002

The following rejection is before us for review:

1. Claims 1-8 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Inoue.

#### ISSUE

The issue before us is whether Appellant has shown that the Examiner erred in finding that the subject matter of claims 1-8 is anticipated by the Inoue reference. With respect to claim 1, this issue turns on whether Inoue discloses a communication passage that has an upper wall that is upwardly

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inclined from a pump receiving portion of a cylinder block toward the upper portion of the cylinder block.

### FINDINGS OF FACT

The following enumerated findings of fact (FF) are supported by at least a preponderance of the evidence. *Ethicon, Inc. v. Quigg*, 849 F.2d 1422, 1427 (Fed. Cir. 1988) (explaining the general evidentiary standard for proceedings before the Office).

FF 1. Figure 4 of the Inoue reference illustrates a network of reinforcing ribs 52, several of which extend transversely outwardly from a central portion of each side of the cylinder block. (Inoue, Fig. 4; ¶[0052].)

FF 2. The Inoue reference contains no written disclosure or any illustration of providing reinforcing ribs on the cylinder block, the ribs being aligned with axes of one or more of the cylinder bores.

### PRINCIPLES OF LAW

Anticipation of a claim exists when each and every element set forth in the claim is found, either expressly or inherently described, in a single prior art reference. *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631 (Fed. Cir.), *cert. denied*, 484 U.S. 827 (1987); *In re Cruciferous Sprout Litig.*, 301 F.3d 1343, 1349 (Fed. Cir. 2002). Once a prima facie case of anticipation has been established, the burden shifts to the Appellant to prove that the prior art product does not necessarily or inherently possess the

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characteristics of the claimed product. *In re Best*, 562 F.2d 1252, 1255 (CCPA 1977).

Patent application claims are given their broadest reasonable interpretation during the application process, for the simple reason that before a patent is granted the claims may be readily amended, for the purpose of distinguishing cited references, or in response to objections raised under Section 112, as part of the examination process. *Burlington Industries, Inc. v. Quigg*, 822 F.2d 1581, 1583 (Fed. Cir. 1987). This broadest reasonable construction is to be assessed in light of the specification as it would be interpreted by one of ordinary skill in the art. *Phillips v. AWH Corp.*, 415 F.3d 1303, 1323 (Fed. Cir. 2005) (*en banc*).

#### ANALYSIS

Appellant argues claims 1-3 as a first group, and argues separately for the patentability of claim 4 and claim 5. Claims 6-8 depend from claim 5 and are not separately argued. We select independent claim 1 as the representative claim for claims 1-3 in deciding this appeal. 37 C.F.R. § 41.37(c)(1)(vii) (2007). Claims 2 and 3 will stand or fall with claim 1. Claims 6-8 will stand or fall with claim 5.

##### *Claim 1*

The rejection of claim 1 is based on the Examiner's contention that Inoue anticipates the claim. Appellant's sole contention, initially, was that the Inoue patent does not, "disclose let alone anticipate the concept of

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having the connecting passage of the water pump outlet with the cylinder pump with the cylinder block cooling jacket ‘inclined upwardly relative to said cylinder bore from said pump receiving portion toward the upper portion of said cylinder block to facilitate casting of said cylinder block without the formation of unwanted metal voids.’” (Appeal Br. 3).

Subsequent to advancing this argument, Appellant admitted at the June 19 Oral Hearing that, “the [Inoue] reference does show a structure that corresponds to the claims, at least the broadest claims.” (Transcript of Oral Hearing, p. 2). Further, with respect to the desired produceability enhancement of the particular cylinder block structure, namely, that of facilitating void-less casting, Appellant acknowledged that, “...quite frankly, the [Inoue] reference *shows* a structure that will achieve that result. It just doesn’t *teach* it.” (Transcript of Oral Hearing, p. 3)(emphasis added).

Appellant’s position has been pared to an assertion that the Inoue reference simply does not point out or teach, to a person of ordinary skill in the art, the advantage that is obtained in casting a cylinder block having a communication passage constructed in accordance with the Inoue reference and in accordance with claim 1. We do not find this persuasive of error in the context of a rejection founded on anticipation. It is not invention to perceive that a product which others had discovered has qualities they failed to detect. *General Electric Co. v. Jewel Incandescent Lamp Co.*, 326 U.S. 242, 248-49 (1945). *See also, Titanium Metals Corp. v. Banner*, 778 F.2d 775, 782 (Fed. Cir. 1985)(it is immaterial to the issue of novelty that an

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applicant may have discovered certain inherent properties of a known product).

We therefore conclude that Appellant has failed to establish that error exists in the rejection of claim 1 as anticipated by Inoue. The rejection of claims 1-3 will accordingly be affirmed.

*Claim 4*

Appellant contends that claim 4 is not anticipated because the Inoue reference does not disclose the claimed pair of axially extending reinforcing ribs each extending transversely outwardly from a central portion of the sides of the cylinder block. (Appeal Br. 3). Appellant argues that the ribs (52) cited by the Examiner in the Inoue reference extend at various angles, but not axially. (*Id.*). The Examiner asserts that the Inoue reference discloses, as part of the network of reinforcing ribs (52), at least several “axially extending ... ribs”. (Answer 5). We agree. Figure 4 of Inoue, for example, illustrates ribs identified by reference numeral 52 that extend transversely outwardly from a central portion of the cylinder body. (FF 1).

Accordingly, we find no reversible error in the rejection of claim 4 as anticipated by Inoue, and will affirm the rejection.

*Claim 5*

Appellant here contends that the Inoue reference does not disclose a plurality of reinforcing ribs formed on opposite sides of the cylinder block wherein the ribs are each aligned with the axis of one of the cylinder bores.<sup>1</sup>

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<sup>1</sup> Appellant describes and illustrates that the axis of a cylinder bore extends

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In particular, Appellant urges that Inoue does not show any vertical ribs that are aligned with the axes of the cylinder bores. Appellant points out in the Specification that the portions of the cylinder block flanking the cylinder bores tend to have lower strength due to the presence of the bores, thus making it desirable to provide reinforcing ribs. (Spec., ¶[0032]).

We find no disclosure, whether in text or by illustration, in the Inoue reference of providing reinforcing ribs each of which is aligned with an axis of one of the cylinder bores. (FF 2). We are thus persuaded that the anticipation rejection of claim 5 under 35 U.S.C. § 102(b) is in error. We will reverse the rejection as it pertains to claim 5 and to claims 6-8 depending from claim 5.

#### CONCLUSION

We conclude that no reversible error exists in the rejection of claims 1-4 under 35 U.S.C. § 102(b).

We conclude that reversible error exists in the rejection of claims 5-8 under 35 U.S.C. § 102(b).

#### DECISION

The decision of the Examiner to reject claims 1-4 is affirmed, while the decision of the Examiner to reject claims 5-8 is reversed.

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vertically when the cylinder block is in its normal, upright position. (Specification, ¶¶[0030], [0032]; Figs. 4, 6, reference numeral 25).

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No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a) (2007).

AFFIRMED-IN-PART

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