

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte JURGEN FREY

Appeal 2008-0085
Application 10/473,520
Technology Center 1700

Decided: January 30, 2008

Before PETER F. KRATZ, CATHERINE Q. TIMM, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

KRATZ, *Administrative Patent Judge*.

DECISION ON APPEAL

This is a decision on an appeal from the Examiner's final rejection of claims 1-5, the only claims that remain pending in this application. We have jurisdiction pursuant to 35 U.S.C. § 6.

Appellant claims an invention that is directed to a method for producing a molding. A temperature measurement occurs at the mold wall and the measured temperature is analyzed and used for controlling at least one of the following: (1) an injection rate; (2) a holding pressure; (3) a holding pressure time; and (4) a mold temperature. Claim 1 is illustrative and reproduced below:

1. A method for producing a molding in a mold having at least one cavity which is surrounded by a mold wall, comprising measuring the temperature at the mold wall which defines the at least one cavity, analyzing the measured temperature, and controlling at least one of injection rate, holding pressure, holding pressure time and mold temperature on the basis of the measured temperature analysis.

The Examiner relies on the following prior art reference as evidence in rejecting the appealed claims:

Hahn 4,615,849 Oct. 7, 1986

Claims 1-5 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Hahn.

We affirm. Our reasoning follows.

Under 35 U.S.C. § 103, the factual inquiry into obviousness requires a determination of: (1) the scope and content of the prior art; (2) the differences between the claimed subject matter and the prior art; (3) the level of ordinary skill in the art; and (4) secondary considerations. *See Graham v. John Deere*, 383 U.S. 1, 17-18 (1966). The analysis supporting obviousness should be made explicit and should “identify a reason that would have prompted a person of ordinary skill in the [art] to combine the elements” in the manner claimed. *KSR Int'l Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741

(2007). “The combination of familiar elements according to known methods is likely to be obvious when it does no more than yield predictable results.” *KSR*, 127 S. Ct. at 1739.

In considering the question of the obviousness of the claimed invention in view of the prior art relied upon, we are guided by the basic principle that the question under 35 U.S.C. § 103 is not merely what the references expressly teach but what they would have suggested to one of ordinary skill in the art at the time the invention was made. *See Merck & Co. v. Biocraft Labs., Inc.*, 874 F.2d 804, 807 (Fed. Cir. 1989) and *In re Keller*, 642 F.2d 413, 425 (CCPA 1981). That is, the question of obviousness cannot be approached on the basis that an artisan having ordinary skill would have known only what they read in the references, because such artisan is presumed to know something about the art apart from what the references disclose. *See In re Jacoby*, 309 F.2d 513, 516 (CCPA 1962). Nor is it necessary that suggestion or motivation be found within the four corners of the references themselves. Indeed, a conclusion of obviousness may be made from common knowledge and common sense of the person of ordinary skill in the art without any specific hint or suggestion in a particular reference. *See In re Bozek*, 416 F.2d 1385, 1390 (CCPA 1969).

Appellant argues the rejected claims together as a group (Br. 3).¹ Accordingly, we select claim 1 as the representative claim on which we decide this appeal.

¹ Our references to the Brief herein are to Appellant’s Brief filed on November 20, 2006.

The Examiner has found that Hahn discloses or suggests a molding method wherein a molding is produced in a mold cavity defined by a mold wall, the temperature of the mold wall is measured and the analyzed measured temperature is used to control a process condition (steam injection) (Ans. 3; Hahn, col. 7, ll. 16-30). In this regard, Hahn discloses that temperature and pressure measurement signals are analyzed, including compared with reference values in a controller, and Hahn further teaches that the controller provides control signals for the molding process, such as steam supply for heating, as a result of the analysis (Abstract, col. 7, ll. 26-50, col. 10, l. 5 - col. 13, l. 37). Based on the above-noted disclosure of Hahn, including the Examiner's findings respecting the disclosure of Hahn in the Answer, and given the level of skill in the art which is evidenced by the teachings of Hahn, the Examiner has reasonably maintained that the claimed method would have been at least *prima facie* obvious to one of ordinary skill in the art at the time of the invention as evidenced by Hahn.²

Appellant acknowledges that Hahn discloses a molding process wherein a temperature transducer (TG, Fig. 3) is mounted in a mold wall (Br. 3). However, Appellant contends that the mold wall that Hahn's transducer is mounted in mates with a second mold wall (11a) to form a cavity and that "there is a great distance between the end of the temperature-transducer element (45) and the mold wall which forms a portion of the mold cavity" (*id.*). Appellant further explains this mating, second wall and great distance argument by the further assertion that Hahn measures the temperature in a wall which defines the mold cavity rather than

² Indeed, it is well settled that anticipation is the epitome of obviousness. See *In re Grose*, 592 F.2d 1161, 1165 (CCPA 1979).

at the inner surface of the mold cavity wall (Br. 5). In this vein, Appellant asserts Hahn's method is unlike the claimed method wherein the temperature measuring is said to occur at the mold wall which defines a mold cavity. Also, Appellant maintains that Hahn "does not teach to analyze the temperature at the mold wall and to control the injection rate and/or the holding pressure and/or the holding pressure time and/or the mold temperature on the basis of this analysis" (Br. 4).

We are not persuaded of reversible error in the Examiner's obviousness rejection by Appellant's contentions for substantially the reasons set forth by the Examiner in the Answer and as further emphasized herein. As articulated by the Examiner in the Answer, "the claim language at issue does not require the inference of [an inner] 'surface' as it relates to the mold wall" temperature measuring location (Ans. 6).

In this regard, it is axiomatic that, in proceedings before the PTO, claims in an application are to be given their broadest reasonable interpretation consistent with the specification, and that claim language should be read in light of the Specification as it would be interpreted by one of ordinary skill in the art. *In re Sneed*, 710 F.2d 1544, 1548 (Fed. Cir. 1983). Moreover, limitations are not to be read into the claims from the Specification. *In re Van Geuns*, 988 F.2d 1181, 1184 (Fed. Cir. 1993) *citing In re Zletz*, 893 F.2d 319, 321 (Fed. Cir. 1989).

Here, the "measuring the temperature at the mold wall..." limitation of representative claim 1, when given its broadest reasonable construction in light of the Specification as it would be construed by one of ordinary skill in the art, does not require a direct measurement of the temperature at the inner surface of the mold wall as seemingly argued by Appellant. We note that

Appellant has not referenced any specialized definition for this disputed claim language that has been furnished in the Specification in the arguments presented. In this regard, our review of the brief Specification description reveals that no such definition was provided therein. While the Specification refers to an end of a mold cavity as a preferred temperature measuring location (Specification 2), Appellant's Specification does not mention an inner surface of a mold cavity wall or end wall. Nor does the Specification disclose how such an inner wall surface location would or could be used as the location where the mold wall temperature is measured at during a molding operation; much less, require such an inner surface location based on the claim language in question. As such, we agree with the Examiner that the claimed temperature measuring at the mold wall step of representative claim 1 is taught by Hahn's use of a temperature measurement element with an ending (45, Fig. 3) that is located within a mold wall (11b, Fig. 3) and positioned flush with the inside thereof (col. 5, ll. 4-7), which element is used for measuring mold wall temperature.

Moreover, Appellant's thinly minted contentions implying that Hahn does not teach or suggest analyzing the measured temperature and controlling an injection rate and/or mold temperature on the basis thereof is clearly without merit given the disclosure and suggestions of Hahn, as referred to above and in the Answer. Also, *see*, for example, claim 1 of Hahn. In this regard, we note that the above referred to disclosure of Hahn clearly conveys that the temperature measuring values are inputted to a control device, a comparison (analysis) is performed by the control device, and the control device controls the supply of steam injection and other inputs

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that influence mold temperature based at least in part on the measured temperature and analysis thereof.

On this record, we affirm the Examiner's obvious rejection of the appealed claims over Hahn.

CONCLUSION

The decision of the Examiner to reject claims 1-5 under 35 U.S.C. § 103(a) as being unpatentable over Hahn is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

AFFIRMED

tf/ls

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