

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. 11

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* DONALD F. SZYDLOWSKI

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Appeal No. 2002-0672  
Application No. 09/158,715

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ON BRIEF

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Before OWENS, WALTZ, and DELMENDO, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This appeal is from the final rejection of claims 10-12, which are all of the claims remaining in the application.

*THE INVENTION*

The appellant claims a catalyst block for a fuel gas steam reformer assembly in a fuel cell power plant. The claims on appeal are as follows:

10. A catalyst block for use in a fuel cell power plant steam reformer assembly, said catalyst block including:
  - a) a catalyst coating on all surfaces of said block;
  - b) at least one internal passageway extending through a

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central web in said block, said internal passageway being operable to funnel a fuel through said block;  
c) at least one external channel extending through outer surfaces of said central web in said block for channeling the fuel around said block, said internal passageway and said external channel providing a degree of contact between said fuel and said catalyst coating which is sufficient to reform said fuel into a process gas that is suitable for use in powering a fuel cell power plant.

11. The catalyst block of Claim 10 wherein said block is curvilinear in configuration so as to match the curvature of a curved catalyst chamber.
12. The catalyst block of Claim 11 wherein there are a plurality of internal passageways and a plurality of external channels.

*THE REFERENCE*

Lesieur	5,733,347	Mar. 31, 1998
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*THE REJECTION*

The claims stand rejected as follows: claims 10 and 12 under 35 U.S.C. § 102(a) as anticipated by Lesieur, and claim 11 under 35 U.S.C. § 103 as obvious over Lesieur.

*OPINION*

We reverse the aforementioned rejections.

*Rejection under 35 U.S.C. § 102(a)*

During patent prosecution, claims are to be given their broadest reasonable interpretation consistent with the specification, as the claim language would have been read by one of ordinary skill in the art in view of the specification and

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prior art. See *In re Zletz*, 893 F.2d 319, 321, 13 USPQ2d 1320, 1322 (Fed. Cir. 1989); *In re Sneed*, 710 F.2d 1544, 1548, 218 USPQ 385, 388 (Fed. Cir. 1983); *In re Herz*, 537 F.2d 549, 551, 190 USPQ 461, 463 (CCPA 1976); *In re Okuzawa*, 537 F.2d 545, 548, 190 USPQ 464, 466 (CCPA 1976). Limitations, however, are not to be read from the specification into the claims. See *In re Prater*, 415 F.2d 1393, 1405, 162 USPQ 541, 551 (CCPA 1969).

The appellant's specification (page 2) and *Lesieur* (col. 1, lines 18-20) indicate that the prior art fuel cell power plant steam reformers used catalyst in pellet form. The appellant's claim 1 claims a catalyst block. This catalyst block, the appellant states, resists the prior art catalyst pellets' slumping and crushing because, unlike those pellets, the catalyst block resists downward settling in the reformer chamber when the reformer walls expand (specification, page 2). The broadest reasonable interpretation of "catalyst block" in view of the specification and prior art, therefore, is that it means a block of catalyst which, unlike catalyst pellets, resists downward settling in a reformer chamber.

"Anticipation requires that every limitation of the claim in issue be disclosed, either expressly or under principles of inherency, in a single prior art reference." *Corning Glass Works*

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*v. Sumitomo Electric*, 868 F.2d 1251, 1255-56, 9 USPQ2d 1962, 1965 (Fed. Cir. 1989).

The examiner argues that Lesieur's reformer sections 28 are catalyst blocks (answer, page 3). Lesieur teaches that "[t]he reformer sections **28** are disposed between the planar wall members **22** and **24** [, and] each of the reformer sections **28** includes a plurality of side-by-side passages **30** which are shown most clearly in **Fig. 3**. The reformer passages **30** can be formed by a corrugated panel **32** or by individual U-shaped strips **34** which are sandwiched between and secured to the planar wall members **22** and **24**" (col. 3, lines 22-29). "All surfaces of the reformer and burner sections of the reformer assembly can be catalyzed after wash coating the assembled reformer" (col. 4, lines 16-18).

As these excerpts from Lesieur indicate, Lesieur's reformer section is not a "catalyst block" as that term is used by the appellant. Because the examiner has not established that the appellant's "catalyst block" limitation is disclosed in Lesieur, either expressly or under principles of inherency, the examiner has not established a *prima facie* case of anticipation over Lesieur of the invention claimed in the appellant's claims 10 or 12. Moreover, claim 12 depends from claim 11 which requires

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that the catalyst block is curvilinear to match the curvature of a curved catalyst chamber. The examiner has not pointed out where Lesieur discloses the curvilinear feature required by the appellant's claim 12.

*Rejection under 35 U.S.C. § 103*

The examiner's argument regarding claim 11 is that "providing [a] different shape for the catalyst block, such as a curvilinear structure of the catalyst block, is within the purview of one having ordinary skill in the art during routine experimentation and optimization of the system, absence [sic, absent] showing any unexpected result thereof" (answer, page 4).

One reason why the examiner's argument is not persuasive is that the examiner has not established that Lesieur would have fairly suggested, to one of ordinary skill in the art, a catalyst block as that term is used by the appellant.

Also, for a *prima facie* case of obviousness to be established, the teachings from the prior art itself must appear to have suggested the claimed subject matter to one of ordinary skill in the art. See *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). The mere fact that the prior art could be modified as proposed by the examiner is not sufficient to establish a *prima facie* case of obviousness. See *In re*

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*Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). The examiner must explain why the prior art would have suggested to one of ordinary skill in the art the desirability of the modification. See *Fritch*, 972 F.2d at 1266, 23 USPQ2d at 1783-84. The examiner's mere assertion that a curvilinear catalyst block would have been within the purview of one of ordinary skill in the art during routine experimentation and optimization is not sufficient to establish that the applied prior art itself would have fairly suggested the desirability of such a structure to one of ordinary skill in the art.

*DECISION*

The rejections over Lesieur of claims 10 and 12 under 35 U.S.C. § 102(a) and claim 11 under 35 U.S.C. § 103 are reversed.

*REVERSED*

Terry J. Owens )  
Administrative Patent Judge )  
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)  
) BOARD OF PATENT  
Thomas A. Waltz )  
Administrative Patent Judge ) APPEALS AND  
)  
) INTERFERENCES  
Romulo H. Delmendo )  
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TJO/eld

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