

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte KEITH LEON CLARK and BRIAN KEITH HOUSOUR

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Appeal No. 2002-0635  
Application No. 09/534,583

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ON BRIEF

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Before THOMAS, RUGGIERO, and LEVY, Administrative Patent Judges.

THOMAS, Administrative Patent Judge.

DECISION ON APPEAL

Appellants have appealed to the Board from the examiner's final rejection of claims 22 through 35, 37, 38 and 40 through 56.

Representative claim 32 is reproduced below:

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32. An output choke for a D.C. arc welder having an inductance comprising a high permeability core having first and second pole pieces and an inductance controlling air gap, said air gap defined by an end surface on said first and second pole pieces, at least a portion of said end surfaces of said first and second pole pieces being spaced from one another and facing one another, said end surfaces of said first and second pole pieces each having corresponding outer edges and a middle portion between said outer edges, at least a portion of the middle portion of said corresponding end surfaces being spaced apart at a varying distance to gradually vary the inductance of said choke over a current range, said middle portions having a configuration to substantially prevent inflection points along a saturation curve of said choke.

The following references are relied on by the examiner:

Cameron et al. (Cameron)	3,646,311	Feb. 29, 1972
Saitoh et al. (Saitoh)	5,204,653	Apr. 20, 1993
Hosozawa et al. (Hosozawa)	5,816,894	Oct. 06, 1998

Claims 32 through 35, 38 and 40 stand rejected under 35 U.S.C. § 102(e) as being anticipated by Hosozawa.

Dependent claims 37 and 52 through 55 stand rejected under 35 U.S.C. § 103 as being obvious over Hosozawa alone.

Claims 22 through 29 and 50 stand rejected under 35 U.S.C. § 103 over appellants' admitted prior art shown at Fig. 2 in view of Hosozawa, with the addition of Saitoh as to claims 30, 31, 43 and 44.

Claims 41, 42 and 56 stand rejected under 35 U.S.C. § 103 as obvious over Hosozawa in view of Saitoh.

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Finally, claims 44 through 49 and 51 stand rejected under 35 U.S.C. § 103 as being obvious over appellants' admitted prior art Fig. 2, Hosozawa and Cameron.<sup>1</sup>

Rather than repeat the positions of the appellants and the examiner, reference is made to the brief and reply brief for appellants' positions and to the answer for the examiner's positions.

#### OPINION

At the outset, we note that because the answer does not indicate the entry of the amended claims attached to or submitted with the principal brief on appeal, the claims on appeal are those claims that have been entered in accordance with the Advisory action from the examiner mailed on March 7, 2001 permitting the entry of the amendment filed on February 23, 2001 upon the filing of the brief. Claim 32 reproduced above is reflective of the version of that claim submitted in accordance with that amendment after final entered by the examiner as noted in the Advisory Office action. From our review of the version of the claims submitted with the brief, our decisions on patent-

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<sup>1</sup> The preexisting rejections of various claims under the 35 U.S.C. § 112, paragraph 1 and paragraph 2 have been withdrawn by the examiner as noted at page 11 of the answer.

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ability in this opinion are not affected thereby. Therefore, the entry of the latest version of the claims in the amendment associated with the appeal brief may be separately handled by the examiner after this appeal.

Because we find ourselves in general agreement with the appellants' positions with respect to the initially stated rejection in the brief and reply brief, we reverse this initially stated rejection as well as all the remaining rejections.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention as well as disclosing structure which is capable of performing the recited functional limitations. RCA Corp. v. Applied Digital Data System, Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir.); cert. dismissed, 468 U.S. 1228 (1984); W.L. Gore and Associates, Inc. v. Garlock, Inc., 721 F.2d 1540, 1554, 220 USPQ 303, 313 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984).

The positions set forth by the examiner in the initial statement of the rejection at pages 3 and 4 of the answer do not address all of the limitations of representative claim 32 on

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appeal. The examiner appears to rely only upon the Fig. 3A embodiment of Hosozawa. The examiner's rationale at this portion of the answer does not address the functional limitations of "said middle portions having a configuration to substantially prevent inflection points along a saturation curve of said choke." The corresponding slightly more specific version of this feature is set forth at the end of claim 22 on appeal as "said air gap having a configuration which results in said inductance of said choke gradually changing with an output current of the welder without saturation in said air gap thereby eliminating inflection points during operation of said welder."

It is thus apparent that the examiner's rejection cannot be sustained on its face because there is not evidence before us that the structure identified by the examiner in Hosozawa discloses structure which is capable of performing the recited functional limitations just noted. A study of this reference leads us to agree with appellants' position in the brief and reply brief that Hosozawa does not teach or disclose the electrical/magnetic properties of the chokes or ferrite cores disclosed among his various embodiments.

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Additionally, we do not agree with the examiner's view expressed at page 11 of the answer that the appellants have not claimed any specific structure of a choke for a D.C. arc welder. The preamble of independent claim 32 recites an output choke for a D.C. arc welder and the end of this claim also recites the functional limitation relating to the choke recited in this preamble. Correspondingly, independent claim 22 has a similar limitation or feature recited in the preamble as well as the recitation of "said welder" at the end of the claim on appeal.

We also disagree with the examiner's view at page 11 of the answer that appellants have only claimed the intended use of the choke. This view is misplaced since, as noted earlier, the quoted features of independent claims 22 and 32 appeal clearly relate to the functional limitations or properties associated with the recited structure and not any use of the choke or any other structure per se.

In order for us to sustain the examiner's rejection under 35 U.S.C. § 102, we would need to resort to speculation or unfounded assumptions to supply deficiencies in the factual basis of the rejections. In re Warner, 379 F.2d 1011, 1017, 154 USPQ 173, 178 (CCPA 1967), cert. denied, 389 U.S. 1057 (1968), reh'g denied, 390 U.S. 1000 (1968). This we decline to do.

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As noted by appellants in the brief and reply brief, the electrical/magnetic properties of the electrical chokes taught in Hosozawa are not detailed, to the extent of not including any disclosure or discussion of the shape or configuration of the air gap having any effect upon magnetic saturation or the elimination of inflection points during the operation of the choke or any device associated with it. Therefore, we are constrained to reverse the rejection of claims 32 through 35, 38 and 40 as being anticipated by Hosozawa.

Correspondingly, the rejection of claims 37 and 52 through 55 under 35 U.S.C. § 103 over Hosozawa alone must also be reversed.

As to the rejection of independent claim 22 in view of appellants' admitted prior art Fig. 2 in view of Hosozawa under 35 U.S.C. § 103, this rejection must be reversed because the appellants' admitted prior art Fig. 2 does not cure the deficiencies with respect to Hosozawa. The same must be concluded with respect to the additional reliance on Saitoh and Cameron as to additional dependent claims.

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In summary, the examiner's decision to variously reject all of the claims on appeal under 35 U.S.C. § 102 or 35 U.S.C. § 103 is reversed.

REVERSED

JAMES D. THOMAS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
JOSEPH F. RUGGIERO	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
	)	
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	)	
STUART S. LEVY	)	
Administrative Patent Judge	)	

JDT/vsh

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