

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DAVID RATTNER and JOSEPH A. O'LEARY

Appeal No. 2004-1690
Application No. 10/223,901

ON BRIEF

Before KIMLIN, KRATZ and JEFFREY T. SMITH, Administrative Patent Judges.

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1-3, all the claims remaining in the present application. Claim 1 is illustrative:

1. A radiator element comprising a gas-permeable conductive metal foam composed of a homogeneous network with a plurality of inter-connected cells, said gas-permeable conductive metal foam attached to a plenum within a radiant burner, said gas-permeable conductive metal foam supporting combustion of a fuel-oxidant mixture within said inter-connected cells, said gas-permeable conductive metal foam communicating heat away from said homogeneous network in a radiant fashion, said gas-permeable

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Buehl, like appellants, is directed to a gas-permeable radiator element that is attached to a plenum within a radiant burner. However, as acknowledged by the examiner, the radiator element of Buehl is not a metal foam, as presently claimed, but a fiber composition. It is the examiner's position, however, that it would have been obvious for one of ordinary skill in the art to substitute the metal foam of Haack for the fiber composition of Buehl. However, as emphasized by appellants, Haack is directed to a heat exchanger that transfers heat via conduction and convection, and does not comprise a burner element which utilizes radiant heat transfer. As a result, we must agree with appellants that Haack fails to provide the requisite suggestion for modifying the radiator element of Buehl. As stated by appellants, "Haack neither explicitly nor implicitly describes combustion within a metal foam" (page 5 of principal brief, last paragraph).

The examiner responds that "[i]t should be noted that the language recited in the claims simply require [sic, requires] **'supporting combustion'**, which was interpreted **as functional language** . . . it is only necessary that the combination be **capable of performing the function**" (page 4 of Answer, last paragraph). However, claim 1 on appeal specifically defines the

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metal foam being attached to a plenum within a radiant burner. Hence, although the examiner states that "appellant discloses the identical structure disclosed by Haack" (id.), the examiner has not indicated a disclosure in Haack that illustrates an attachment between the metal foam and a plenum within a radiant burner, and no such disclosure is apparent to us. It seems that the examiner fails to appreciate that appellants are claiming a radiator element comprising a metal foam attached to a plenum within a radiant burner, and not merely a metal foam, per se.

In conclusion, based on the foregoing, the examiner's decision rejecting the appealed claims is reversed.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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PETER F. KRATZ)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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)	
JEFFREY T. SMITH)	
Administrative Patent Judge)	

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