

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today
(1) was not written for publication in a law journal and
(2) is not binding precedent of the Board.

Paper No. 12

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MICHAEL C. MARTIN

Appeal No. 97-1229
Application 08/280,950¹

ON BRIEF

Before PATE, STAAB and CRAWFORD, Administrative Patent Judges.
PATE, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 2-9. These are the only claims remaining in the application.

¹ Application for patent filed July 27, 1994.

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The invention is directed to a fire warning system in an aircraft. More specifically the engine cowling of the aircraft is equipped with a light transmission means which has an inner end in communication with the interior of the engine compartment and an outer end visible to the pilot of the aircraft. The light transmission means transmits any light from flames in the engine compartment to a position visible to the pilot.

Claim 9 reproduced below is further illustrative of the claimed subject matter.

1. In combination:

an airplane having an engine cowling;

said cowling having a top portion which is visible to the pilot of the airplane;

a light transmission means having an inner end in communication with the interior of said cowling and an outer end positioned on said top portion of said cowling which is visible to the pilot of the airplane so that if a fire should occur within the engine cowling, the light from the fire within the cowling will be visible to the pilot.

The references of record relied upon by the examiner in his rejection under 35 U.S.C. § 103 are:

Metcalf	2,692,982	Oct. 26, 1954
Bauerlein	2,873,714	Feb. 17, 1959
Miller	2,921,552	Jan. 19, 1960
Kern et al. (Kern)	4,701,624	Oct. 20, 1987

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The appellant states in his brief that claims 2-9 do not stand or fall together and has provided arguments for the independent patentability of these claims.

The examiner rejected claims 2-9 under 35 U.S.C. § 103 as unpatentable over Metcalf and Kern in view of Miller and Bauerlein. The examiner states the rejection thusly:

"Metcalf and Kern et al both show that it is well known to provide optical means on engines to detect fires. Metcalf shows that such sensors are located all around the engine including the top of the cowling. Metcalf and Kern et al are both using electronic sensors which is the automatic equivalent of purely visual system. Kern et al uses fiber optic cables to transmit the light of the fire to a remote location for sensing. Miller and Bauerlein show visual systems whereby magnifier lenses and reflecting surfaces are used so that a remote person can detect light on the opposite side of [a] solid surface. It would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the electronic detection of Metcalf or Kern et al with purely visual optical means such as shown be [sic, by] Miller and Bauerleing since this would be a simpler system with less hardware requirements." (Examiner's Answer, Page 3).

OPINION

We have carefully review the rejection on appeal in light of the arguments of the examiner and the appellant. As a

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result of this review, we have reached the conclusion that the cited prior art does not establish a prima facie case of obviousness with respect to the claims on appeal. Therefore the rejection of these claims is reversed.

It is our findings that Metcalf and Kern both provide electronic means for detecting a fire in an aircraft. Metcalf is disclosed as being installed under the engine cowling or inside a jet nacelle. Kern is disclosed as being installed in a wing fuel tank of a military aircraft. Neither of these references provide a teaching first of a visual means, and second of a purely optical means for fire detection.

The patents to Miller and Bauerlein are not directed to fire detection. Miller shows a purely optical means of establishing whether the lights are on in a room without opening the door. Bauerlein is an optical means which indicates the level of syrup in a soda fountain. While both of these patents are directed to purely optical indicating means, neither is related to fire detection and neither would have taught placing the fire detection apparatus in an airplane engine cowling.

Given the findings of fact above, it is our conclusion that the examiner's combination of references does not establish a prima facie case of obviousness. We have so concluded, not

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withstanding the basic simplicity of appellant's invention viewed from hindsight, for, as our reviewing court has often stated simplicity and hindsight are not proper criteria for resolving the issue of obviousness. In re Horn, 203 USPQ 969, 971 (CCPA 1979). Accordingly, the rejection of claims 2-9 on appeal is reversed.

REVERSED

WILLIAM F. PATE, III)	
Administrative Patent Judge)	
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LAWRENCE J. STAAB)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
)	INTERFERENCES
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