

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 24

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT MAYNARD JAAP, PAMELA LULKOSKI,
JEFFREY McKEVENY, JAN OBRZUT
and KENNETH LYNN POTTER

Appeal No. 2004-1073
Application No. 09/046,105

ON BRIEF

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

KIMLIN, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1, 3, 4, 6-9, 11, 12, 14, 23-25, 28-30, 33 and 34. Claim 1 is illustrative:

1. A woven fiberglass cloth comprising an oxide or salt of at least one member selected from the group consisting of Cu, Cr, and mixtures thereof in an amount sufficient to reduce the glass transmittance of UV light having a wavelength of 365 nanometers;

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and wherein the oxide or salt is present in an amount of about 0.1 to 2% by weight of the fiberglass cloth; and wherein the oxide or salt is incorporated in a glass composition selected from the group consisting of D glass, S glass and E glass.

The examiner relies upon the following references as evidence of obviousness:

Loughridge	3,531,677	Sep. 29, 1970
Miyauchi et al. (Miyauchi)	5,942,331	Aug. 24, 1999
Shioura et al. (JP '552) (Japanese patent)	Sho 63-225552	Sep. 20, 1988
Naka et al. (JP '633) (Japanese patent)	03-261633	Nov. 21, 1991

Appellants' claimed invention is directed to a woven fiberglass cloth comprising a glass composition having an oxide or salt of copper or chromium therein. The compounds of copper and chromium allow the glass to absorb UV light and be used in substrates for printed circuit boards and the like. According to appellants, "[t]he present invention provides for significantly reducing, if not entirely eliminating, UV light transmission through a reinforced substrate" (page 4 of Brief, second paragraph).

All the appealed claims stand rejected under 35 U.S.C. § 103 as being unpatentable over either JP '552 or JP '633 in combination with Loughridge and Miyauchi.

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We have thoroughly reviewed the respective positions advanced by appellants and the examiner. In so doing, we find ourselves in agreement with appellants that the examiner has failed to establish a prima facie case of obviousness for the claimed subject matter. Accordingly, we will not sustain the examiner's rejections.

JP '552 and JP '633, like appellants, are directed to an ultraviolet-absorbing glass fiber composition, but both references fail to teach or suggest the use of either of the claimed copper or chromium compounds as UV-absorbing agents in the glass composition. As emphasized by appellants, both references teach very specific combinations of compounds in specific amounts to provide the function of UV absorption. In particular, JP '633 discloses a glass fiber composition comprising Fe_2O_3 , CeO_2 and TiO_2 . JP '552 teaches a UV-absorbing glass composition comprising the same three components in addition to MnO_2 and As_2O_5 .

To remedy the deficiencies in the primary references the examiner cites Loughridge and Miyauchi for teaching the equivalence of the claimed chromium and copper oxides and the disclosed oxides of iron, cerium, titanium, cobalt, manganese and nickel as UV absorbing agents. However, Loughridge is directed

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to a radiation-absorbing glaze on a quartz glass envelope and Miyauchi is directed to a colored film-coated glass article. Neither Loughridge nor Miyauchi provides any teaching or suggestion that the oxides of copper and chromium can be effectively used in glass fiber compositions. Likewise, neither of the primary references provides any general teaching that a variety of known UV-absorbing agents can be effectively used in making glass fiber compositions. Hence, in the absence of the requisite teaching or suggestion in either the primary or secondary references, we must concur with appellants that the examiner's conclusion of obviousness is based more upon the use of impermissible hindsight than the teachings of the applied prior art. In our view, based on the prior art as a whole, we agree with appellants that it cannot be reasonably presumed that the use of the claimed copper and chromium oxides "would effectively absorb UV light without adversely affecting other important characteristics required of a woven cloth" (page 7 of Brief, first paragraph).

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In conclusion, based on the foregoing, we are constrained to reverse the examiner's rejections.

REVERSED

EDWARD C. KIMLIN)	
Administrative Patent Judge)	
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JEFFREY T. SMITH)	BOARD OF PATENT
Administrative Patent Judge)	APPEALS AND
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BEVERLY PAWLIKOWSKI)	
Administrative Patent Judge)	

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