

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.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. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte MITSURU SATO, HATSUYUKI TANAKA
and TOSHIMASA NAKAYAMA

Appeal No. 95-4109
Application No. 08/127,640¹

HEARD: April 7, 1999

Before SOFOCLEOUS, JOHN D. SMITH and GARRIS, Administrative Patent Judges.

GARRIS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the final rejection of claims 1 through 9 which are all of the claims in the application.

¹ Application for patent filed September 28, 1993.

Appeal No. 95-4109
Application No. 08/127,640

The subject matter on appeal relates to an aqueous developer solution for an alkali-developable photoresist composition which includes conventional ingredients in combination with an inorganic ammonium salt selected from the group consisting of ammonium sulfate, ammonium phosphates and ammonium borates in an amount in the range from 0.01 to 0.20 percent by weight. This appealed subject matter is adequately represented by independent claim 1 which reads as follows:

1. An aqueous developer solution for an alkali-developable photoresist composition which comprises, as a uniform solution:

- (a) water as the solvent;
- (b) a water-soluble organic basic compound;
- (c) a surface active agent; and

(d) an inorganic ammonium salt selected from the group consisting of ammonium sulfate, ammonium phosphates and ammonium borates in an amount in the range from 0.01 to 0.20% by weight based on the total amount of the components (a), (b) and (c).

The references relied upon by the examiner as evidence of obviousness are:

Walls 1976	3,954,472	May 4,
Walls 1981	4,308,340	Dec. 29,

Appeal No. 95-4109
Application No. 08/127,640

Walls 1983	4,381,340	Apr. 26,
Tanka et al. (Tanka) 1989	4,820,621	Apr. 11,
Kato et al. (Kato) 1990	4,914,006	Apr. 3,
Japanese reference (Tanaka) 1992	4-204454	Jun. 24,

Claims 1 through 9 stand rejected under 35 U.S.C. § 103 as being unpatentable over: Tanka in view of Walls (4,381) or Walls (4,308); Kato in view of Walls (4,381) or Walls (4,308); and the Japanese reference in view of Walls (4,381) or Walls (4,308) or Walls (3,954).

None of these rejections can be sustained. As correctly indicated by the appellants in their Brief, even if the applied prior art were combined in the manner proposed by the examiner, the resulting developer solution would contain a minimum ammonium salt concentration of about 1% (e.g., see the first full paragraph in column 5 of Walls (4,381)) which is far in excess of the maximum 0.20% concentration defined by the independent claim on appeal. In this regard, it is appropriate to emphasize that neither the Answer nor Supplemental Answer contains any discussion at all as to why

Appeal No. 95-4109
Application No. 08/127,640

the here claimed ammonium salt concentration would have been obvious over the applied prior art. Thus, the examiner has not even shouldered much less carried her initial burden of establishing a prima facie case of obviousness. For this reason alone, we cannot sustain any of the § 103 rejections before us on this appeal.

Appeal No. 95-4109
Application No. 08/127,640

The decision of the examiner is reversed.

REVERSED

MICHAEL SOFOCLEOUS)	
Administrative Patent Judge)	
)	
)	
)	
)	BOARD OF PATENT
JOHN D. SMITH)	APPEALS
Administrative Patent Judge)	AND
)	INTERFERENCES
)	
)	
)	
BRADLEY R. GARRIS)	
Administrative Patent Judge)	

bae

Appeal No. 95-4109
Application No. 08/127,640

Stoll, Miskin, Previto, Hoffman & Badie
Empire State Building
350 Fifth Avenue, Suite 6110
New York, NY 10118