

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.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. 23

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* EIICHI AKUTSU, HIROSHI TAKAYAMA, SHIGEHITO ANDO,  
KENJI OGI and YASUHIRO UEHARA

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Appeal No. 1998-2215  
Application 08/700,578

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ON BRIEF

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Before GARRIS, WARREN and OWENS, *Administrative Patent Judges*.  
OWENS, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is an appeal from the examiner's final rejection of claims 1-8, 10-15 and 19-24, which are all of the claims remaining in the application.

*THE INVENTION*

The appellants' claimed invention is directed toward a device for heating and fixing a toner image in an image

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forming apparatus such as a copy machine or a printer, and to a fixing apparatus which uses this device. Claim 1, which is directed toward the heating and fixing device, is illustrative:

1. A heat generating medium for image fixing, comprising:

an electrically and thermally conductive support layer having a thickness of greater than or equal to 3  $\mu\text{m}$ ;

an adhesion prevention layer formed on a surface of said conductive support layer; and

a heat generating layer having a thickness of less than or equal to 20  $\mu\text{m}$  formed on another surface of said conductive support layer.

*THE REFERENCE*

Akutsu et al. (Akutsu)                      5,151,719                      Sep. 29, 1992

*THE REJECTION*

Claims 1-8, 10-15 and 19-24 stand rejected under 35 U.S.C. § 103 as being unpatentable over Akutsu.

*OPINION*

We reverse the aforementioned rejection. We need to address only claim 1, which is the broadest claim.

Akutsu discloses a heat generating medium for image

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fixing which comprises an electrically and thermally  
conductive layer (5) having a thickness of 1,200 D (0.12  $\mu\text{m}$ ),  
an adhesion prevention layer formed on a surface of the  
conductive layer and

having a thickness of 0.05-7  $\mu\text{m}$ , preferably 0.1-1  $\mu\text{m}$ , and a  
heat generating layer having a thickness of 0.3-150  $\mu\text{m}$  formed  
on another surface of the conductive layer (col. 2, lines 39-  
63; col. 3, lines 62-67; col. 6, lines 48-50 and 65-68). A  
wear-resistant contact resistance layer (8), which preferably  
is electrically discontinuous in its longitudinal direction,  
can be formed on the heat generating layer to prolong the life  
of the device (col. 6, lines 9-15; col. 7, lines 1-9; figure  
2).

The examiner argues that "Akutsu shows one example which  
includes a 50 micron thick heat generating layer and a  
0.12 micron thick conductive support layer<sup>[1]</sup>, but later states

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<sup>1</sup> As correctly pointed out by the appellants (brief,  
page 9), Akutsu does not refer to the conductive layer as a  
support layer.

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that the heat generating layer can be as thin as 0.3 microns thick, which would suggest to the artisan that the conductive support layer should be thickened proportionally to the reduction in thickness of the heat generating layer to provide adequate strength for the finished laminate" (answer, page 7). The examiner also argues: "The adhesion prevention layer is no more than 7 microns, preferably no more than 1 micron (col. 6, lines 49-50). Since the [sic] both the heat generating layer and

the adhesion prevention layer are extremely thin, the structural integrity of the final laminate would necessarily be provided by the conductive support layer" (answer, page 9).

In order for a *prima facie* case of obviousness to be established, the teachings from the prior art itself must appear to have suggested the claimed subject matter to one of ordinary skill in the art. See *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976). The mere fact that the prior art could be modified as proposed by the examiner is not

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sufficient to establish a *prima facie* case of obviousness.  
See *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783  
(Fed. Cir. 1992).

Akutsu does not disclose that there are any layer thickness requirements for maintaining the structural integrity of the laminate. Moreover, even if one of ordinary skill in the art would have expected a structural integrity problem to be caused by using Akutsu's adhesion preventing layer or electric heating layer minimum thicknesses of, respectively, 0.05 Fm and 0.3 Fm (col. 6, lines 49 and 67), there is no indication in the reference that such a person would maintain the structural integrity by increasing the thickness of the 0.12 Fm conductive

layer rather than using a greater thickness of one of the adhesion preventing layer and electric heating layer, which have disclosed maximum thicknesses of, respectively, 7 Fm and 150 Fm (col. 6, lines 49 and 67), or using a contact resistance layer. The record indicates that the motivation relied upon by the examiner for using Akutsu's conductive

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layer as a support layer and increasing its disclosed thickness by a factor of 25 to arrive at the claimed invention comes from the appellants' disclosure rather than the applied reference and that, therefore, the examiner used impermissible hindsight when rejecting the claims. See *W.L. Gore & Associates v. Garlock, Inc.*, 721 F.2d 1540, 1553, 220 USPQ 303, 312-13 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984); *In re Rothermel*, 276 F.2d 393, 396, 125 USPQ 328, 331 (CCPA 1960). Accordingly, we reverse the examiner's rejection.

*DECISION*

The rejection of claims 1-8, 10-15 and 19-24 under 35 U.S.C. § 103 over Akutsu is reversed.

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*REVERSED*

BRADLEY R. GARRIS	)	
Administrative Patent Judge	)	
	)	
	)	
	)	
CHARLES F. WARREN	)	BOARD OF PATENT
Administrative Patent Judge	)	APPEALS AND
	)	INTERFERENCES
	)	
	)	
TERRY J. OWENS	)	
Administrative Patent Judge	)	

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