THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

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opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

15-2482

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte CHRISTOPHER SNELLING

Appeal No. 95-2482
Application 07/970,435[1]

ON BRIEF

Before JOHN D. SMITH, GARRIS, and OWENS, *Administrative Patent Judges.*

JOHN D. SMITH, *Administrative Patent Judge.*

DECISION ON APPEAL

This is an appeal from the final rejection of claims 90 and 92 through 104. Claims 1 through 89 and 91 have been cancelled. As a result of an extensive "post appeal" prosecution, claims 92

[1] **Application for patent filed November 2, 1992, which is, according to appellant, a continuation of Serial No. 07/602,586, filed October 24, 1990, now abandoned.**

through 97 and 104 have been allowed, and claims 98 through 102 have been objected to as dependent upon a base claim. See Paper No. 25. Thus, the appeal of claims 90 and 103, as amended by Paper No. 22 and Paper No. 24 respectively, remain for our consideration.

The claims on appeal are drawn to an electrophotographic imaging process involving the formation and development of electrostatic latent images on an imaging surface of an electrophotographic imaging member (specification, page 1). Importantly, the imaging member used in appellant's process comprises a substrate having thereon a unitary electrophotographic insulating layer, the outer surface of which consists of a transparent film forming polymer containing "imbibed" dye molecules. The expression "imbibed" is defined as "the absorbing and taking into solid solution" of a "sublimed or vaporized dye by the film forming polymeric binder phase" (specification, page 19, lines 6 through 8).

Claims 90 and 103 are reproduced below:

90. An electrophotographic imaging method comprising providing an imaging member comprising a substrate, a unitary electrophotographic insulating layer which is electrically insulating in the dark and electrically conductive when struck by activating radiation and a continuous, substantially transparent film forming polymer phase, said layer having a surface facing away from said substrate, said surface facing away from said substrate comprising imbibed dye molecules, and subjecting said imaging member to an imaging cycle comprising forming a uniform charge on said imaging member, exposing said uniform charge on said imaging member in a single step to a light image to form at

least one electrostatic latent image, developing said latent image with marking particles to form a toned image, transferring said toned image to a receiving member in a single step, and fixing said toned image to said receiving member.

103. An electrophotographic imaging method comprising providing an imaging member comprising a substrate, a single unitary photoconductive layer which is electrically insulating in the dark and electrically conductive when struck by activating radiation, said single unitary photoconductive layer comprising a continuous, substantially transparent film forming polymer phase, said polymer phase having a surface facing away from said substrate, said surface facing away from said substrate defining an outer boundary of at least one region within said polymer phase, said region comprising a solid solution of from about 0.01 percent and about 5 percent by weight of an imbibed vaporized or sublimed dye molecules, based on the total weight of said film forming polymer in said region, and subjecting said imaging member to an imaging cycle comprising forming a uniform charge on said imaging member, exposing said uniform charge on said imaging member in a single step to a light image to form at least one electrostatic latent image, develcping said latent image with marking particles to form a toned image, transferring said toned image to a receiving member in a single step, and fixing said toned image to said receiving member.

The references of record now relied upon by the examiner are:

Haneda et al. (Haneda)	4,738,911	Apr. 19, 1988
Brault et al. (Brault)	4,081,277	Mar. 28, 1978
Miller et al. (Miller)	3,212,887	Oct. 19, 1965

Claims 90 and 103 stand rejected under 35 USC 103 as unpatentable over Haneda in view of Brault and Miller. We affirm.

As evidence of obviousness of the subject matter defined by claims 90 and 103,[2] the examiner relies on disclosures in Haneda,

[2] The claims stand or fall together. See the brief at page 6.

Brault and Miller. That Haneda discloses an electrophotographic imaging method comprising the manipulative steps themselves as claimed in appellant's process is not reasonably disputed by appellant. Moreover, as noted by the examiner, Haneda's method uses a photoreceptor comprised of a substrate coated with an insulating layer, the outer surface of which contains a color separation filter of coloring agents inclusive of dyes which are formed thereon by techniques including vapor deposition (compare Figures 2 and 7 and see column 3, lines 35 through 64, particularly page 47 and 60).

What appellant argues is that Haneda does not teach "imbibation of dyes into a polymer layer" as claimed by him, because, according to appellant, Haneda requires that the dye filter is a separate layer from the insulating layer which necessarily adheres on the surface of the insulating layer (brief, pages 15 and 16). We cannot subscribe to this argument. Indeed, how one would avoid the formation of an imbibed dye filter using a vapor deposition technique as suggested by Haneda is not explained by appellant, since such a technique requires heating of the dye to a vapor state which would necessarily effect impregnation of the dye into the polymeric surface.

It is correct, as argued by appellant that Haneda provides no specific details as to how one can form a dye color separation filter in his process by vapor deposition. However, forming a

dye coating by sublimation, a technique fairly suggested and contemplated by Haneda, necessarily involves vaporization of a sublimable dye with resulting diffusion into a substrate. See Brault at column 4, lines 16 through 19 and also compare the specification at page 19, line 5 through page 20, line 28. To the extent that Brault adds interpretive explanation to the disclosure of Haneda and describes specific methodology for vapor deposition of dyes, we find Brault's teachings as supporting the examiner's obviousness determination. Further, to the extent relied upon, the Miller reference also supports a finding of obviousness.

In light of the foregoing, we find that the relevant disclosures of the relied upon prior art references raise a strong inference of obviousness for the claimed subject matter on appeal. Since no objective evidence of nonobviousness is relied on by appellant, we necessarily agree with the examiner's ultimate legal conclusion that the claimed subject matter herein would have been obvious within the meaning of 35 USC §103.

The decision of the examiner, accordingly, is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. §1.136(a).

AFFIRMED

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