

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

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* THOMAS RAUCH and MARTIN WURTENBERGER

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Appeal No. 2005-1485  
Application No. 10/317,040

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ON BRIEF

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Before GARRIS, PAK and KRATZ, *Administrative Patent Judges*.  
PAK, *Administrative Patent Judge*.

*DECISION ON APPEAL*

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 1 through 5, 12 through 15 and 21 through 30, which are all of the claims pending in the above-identified application.

The subject matter on appeal is directed to a method of coloring "cut gemstones." See the specification, page 1 and claims 1 and 21. The method involves effectively and economically introducing color-producing metals or metal oxides into a surface

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layer of the cut gemstones without causing any damage thereto due to unwanted reactions. See the specification, pages 1-3. The method lies in placing and heating cut gemstones on a solid plate made of color-producing metal or metal oxide. *Id.* Further details of the appealed subject matter are recited in claims 1 and 21 which are reproduced below:

1. A method of coloring cut gemstones by introducing metal or metal oxide into a surface layer by heat treatment, wherein during the heat treatment the gemstones are laid on a solid plate and the metal or metal oxide forms a substantial constituent of the plate.

21. A method of coloring cut gemstones by introducing metal or metal oxide into a surface layer by heat treatment, comprising:

laying the cut gemstones on a solid plate, the metal or metal oxide forming a substantial constituent of the plate; and

performing heat treatment with the cut gemstones on the solid plate such that the metal or metal oxide is introduced into the surface layer of the cut gemstones.

In support of his rejections, the examiner relies on the following prior art references:

Nagasawa et al. (Nagasawa)	3,805,124	Apr. 16, 1974
Hazelrigg, Jr. et al. (Hazelrigg)	4,061,549	Dec. 6, 1977
Gibson	5,791,237	Aug. 11, 1998
Pollak	5,888,918	Mar. 30, 1999

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The claims on appeal stand rejected as follow:

1. Claims 1, 4, 21 and 24 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Pollak and Nagasawa;
2. Claims 2, 3, 5, 12 through 15, 22, 23 and 25 through 29 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Pollak, Nagasawa and Hazelrigg; and
3. Claim 30 under 35 U.S.C. § 103 as unpatentable over the combined disclosures of Pollak, Nagasawa and Gibson.

We have carefully reviewed the claims, specification and applied prior art, including all of the arguments advanced by both the examiner and the appellants in support of their respective positions. This review has led us to conclude that the examiner's Section 103 rejections are not well founded. Accordingly, we will not sustain the examiner's Section 103 rejections for essentially those reasons set forth in the Brief and the Reply Brief. We add the following primarily for emphasis.

Under Section 103, to establish a *prima facie* case of obviousness, "there must be some teaching, suggestion, or motivation to combine the [prior art] references. [Citation omitted]." *In re Rouffet*, 149 F.3d 1350, 1355, 47 USPQ2d 1453, 1456 (Fed. Cir. 1998). When determining the patentability of a

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claimed invention which combines several elements, "the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination. [Citation omitted]." *Rouffett*, 149 F.3d at 1356, 47 USPQ at 1456.

Here, even assuming Nagasawa is from an analogous art, the examiner has not identified any teaching, suggestion or motivation to employ a plate made of color-producing metals or metal oxides in the cut gemstone coloring method described in Pollack. As correctly pointed out by the appellants (Brief, page 5), Nagasawa only teaches diffusing an acceptor impurity, such as aluminum, in powder form or plate form into a stannic oxide slab for the purpose of making a photoconductive laminal region. Nothing in Ngasawa indicates that diffusing an acceptor impurity in the form of a plate into a stannic oxide slab for the purpose of producing a photoconductive laminal region is suitable, much less desirable, for **effectively** coloring cut gemstones.<sup>1</sup> Thus, on this record, we are constrained to agree with the appellants that the examiner has not demonstrated that "the prior art as **a whole**" would have

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<sup>1</sup> The examiner relies on Hazelrigg drawn to an electrolytic cell anode structure and Gibson drawn to a garlic press to show the features recited in dependent claims only.

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suggested the desirability, and thus the obviousness, of using the claimed plate made of color-producing metal or metal oxide in a cut gemstone coloring method. See *In re Lee*, 277 F.3d 1338, 1343-44, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002). ("This factual question of motivation is material to patentability, and could not be resolved on subjective belief and unknown authority"); see also *In re Dembiczak*, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999)("[T]he best defense against the subtle but powerful attraction of a hindsight-based obviousness analysis is rigorous application of the requirement for a showing of the teaching or motivation to combine prior art references").

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In view of the foregoing, we are constrained to reverse the examiner's decision rejecting the claims on appeal under Section 103.

*REVERSED*

BRADLEY R. GARRIS	)	
Administrative Patent Judge	)	
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	)	
	)	BOARD OF PATENT
CHUNG K. PAK	)	APPEALS
Administrative Patent Judge	)	AND
	)	INTERFERENCES
	)	
	)	
PETER F. KRATZ	)	
Administrative Patent Judge	)	

CKP/hh

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