

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. 21

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte ROLLAND D. O'GROSKE, KEITH F. THARP,  
SANDY J. SHIRK/HEATH, PAUL W. SCHAEFER,  
SCOTT M. THORVILSON and MICHAEL K. BROWN

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Appeal No. 1998-2368  
Application No. 08/443,217

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ON BRIEF

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Before JERRY SMITH, BARRETT, and BARRY, Administrative Patent Judges.

BARRY, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal under 35 U.S.C. § 134 from the rejection of claims 1 and 6. We reverse.

BACKGROUND

The invention at issue in this appeal relates to shielded cabling. Current carrying cables are commonly shielded from electromagnetic energy. A conventional shielded cable, e.g.,

a coaxial cable, includes an insulated conductor surrounded by an electromagnetic shield formed using a foil wrapper and braided wire. Unfortunately, such a conventional cable affords incomplete shielding. Furthermore, bending or other moving spreads the wire braid and foil wrapper, thereby degrading the integrity of the shielding.

The appellants' shielded cable includes insulated conductors; a flexible, seamless covering surrounding the conductors; and an outermost jacket surrounding the covering. In turn, the flexible, seamless covering comprises a conductive layer bonded to an insulating layer, where the conductive layer forms a seamless, electromagnetic shield. Because the conductive layer is seamless and has a thickness much less than the thickness of the insulating layer, the inventive shielded cable purportedly provides enhanced shielding while remaining flexible.

Claim 1, which is representative for our purposes, follows:

1. A flexible shielded bulk cable, comprising:

a plurality of insulated conductors;

a flexible seamless covering surrounding the plurality of insulated conductors, said flexible seamless covering including an insulating layer and a conductive layer surrounding said insulating layer that forms a seamless electromagnetic shield, the conductive layer being bonded to the insulating layer and having a thickness substantially less than the thickness of the insulating layer, wherein the conductive layer is formed of a composition of silver and silicone; and

an outermost jacket surrounding said conductive layer, wherein said conductive layer has an exterior surface and said outermost jacket has an interior surface, said interior surface of said outermost jacket being in contact with said exterior surface of said conductive layer.

The references relied on in rejecting the claims follow:

Jarger	3,888,088	June 10,
1975		
Schafer	4,161,704	July 17,
1979		
Singles et al. (Singles)	5,477,011	Dec.
19, 1995	(filed Mar. 3, 1994)	
Kobayashi et al. (Kobayashi)	5,521,333	May
28, 1996	(filed June 21, 1994).	

Claims 1 and 6 stand rejected under 35 U.S.C. § 103 as obvious over Kobayashi in view of Schafer, Singles, and Jarger. Rather than repeat the arguments of the appellants or examiner in toto, we refer the reader to the brief and answer for the respective details thereof.

OPINION

In deciding this appeal, we considered the subject matter on appeal and the rejection advanced by the examiner. Furthermore, we duly considered the arguments and evidence of the appellants and examiner. After considering the totality of the record, we are persuaded that the examiner erred in rejecting claims 1 and 6. Accordingly, we reverse.

We begin by noting the following principles from In re Rijckaert, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993).

In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a prima facie case of obviousness. In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).... "A prima facie case of obviousness is established when the teachings from the prior art itself would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." In re Bell, 991 F.2d 781, 782, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting In re Rinehart, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)). If the examiner fails to establish a prima facie case, the rejection is improper and will be overturned. In re Fine, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988).

With these principles in mind, we consider the examiner's rejection and the appellants' argument.

Admitting that Kobayashi does not disclose that its conductive layer and insulating layer are seamless, the examiner alleges, "[i]t would have been obvious ... to modify the Kobayashi et al. cable by ... substituting the seamless layers as taught by Schafer for the insulating and conducting layers of Kobayashi et al. since they are functionally equivalent (covering)." (Examiner's Answer at 5.) The appellants argue, "[a]bsent Applicant's specification, the Examiner can cite no objective basis for the Examiner's specific selection and combination of elements." (Appeal Br. at 5.)

Claims 1 and 6 specify in pertinent part the following limitations: "a flexible seamless covering surrounding the plurality of insulated conductors, said flexible seamless covering including an insulating layer and a conductive layer surrounding said insulating layer that forms a seamless electromagnetic shield ...." Accordingly, the limitations require a conductive layer forming a seamless, electromagnetic shield.

The examiner also fails to show a suggestion of the limitations in the prior art. "It is impermissible to use the claimed invention as an instruction manual or 'template' to piece together the teachings of the prior art so that the claimed invention is rendered obvious." In re Fritch, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1784 (Fed. Cir. 1992) (citing In re Gordon, 733 F.2d 900, 902, 221 USPQ 1125, 1127 (Fed. Cir. 1984)). "Expedients which are functionally equivalent to each other are not necessarily obvious in view of one another. The statutory mandate of 35 U.S.C. 103 is that the claimed subject matter be unobvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains." In re Scott, 323 F.2d 1016, 1019, 139 USPQ 297, 299 (CCPA 1963). "[T]he 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.'" In re Beattie, 974 F.2d 1309, 1311-12, 24 USPQ2d 1040, 1042 (Fed. Cir. 1992) (quoting Lindemann Maschinenfabrik GMBH v. American Hoist & Derrick Co., 730 F.2d 1452, 1462, 221 USPQ 481, 488 (Fed. Cir. 1984)).

Here, Schafer does teach a "seamless layer **36** of dielectric material ... surrounded by an outer seamless jacket **38** of conductive material compressing layer **36** radially inwardly ...." Col. 4, ll. 44-47. Assuming arguendo that the reference's seamless layer of dielectric material surrounded by an outer seamless jacket of conductive material is functionally equivalent to Kobayashi's teaching of "a polyester tape **3**, a tinned soft copper wire **4**," col. 1, ll. 63-64, it still does not follow that substitution of the former for the latter would have been obvious to one of ordinary skill in the art. The examiner also fails to allege, let alone show, that Singles and Jarger cure the deficiency. Because the examiner omits a line of reasoning that explains why the substitution would have been desirable, we are not persuaded that the prior art would have suggested combining the teachings of Kobayashi and Schafer. Therefore, we reverse the rejection of claims 1 and 6 as obvious over Kobayashi in view of Schafer, Singles, and Jarger.

CONCLUSION

In summary, the rejection of claims 1 and 6 under 35 U.S.C. § 103 as obvious over Kobayashi in view of Schafer, Singles, and Jarger is reversed.

REVERSED

JERRY SMITH	)	
Administrative Patent Judge	)	
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	)	BOARD OF PATENT
LEE E. BARRETT	)	APPEALS
Administrative Patent Judge	)	AND
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LANCE LEONARD BARRY	)	
Administrative Patent Judge	)	

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