

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ULRICH FOESEL

Appeal 2007-2260
Application 10/937,261
Technology Center 3600

Decided: February 27, 2008

Before MURRIEL E. CRAWFORD, JENNIFER D. BAHR, and DAVID B. WALKER, *Administrative Patent Judges*.

CRAWFORD, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellant appeals under 35 U.S.C. § 134 (2002) from a final rejection of claims 1 to 8, 10 to 17, 19 and 20. Claims 9 and 18 have been cancelled. We have jurisdiction under 35 U.S.C. § 6(b) (2002). Appellant presented oral argument on January 24, 2008.

Appellant invented a diesel-electric locomotive having one cable, originating from a generator, to supply electrical power to the drive unit and another cable including a transformer, originating from the generator, to supply electric power to secondary appliances (Specification 1 to 2).

Claim 1 under appeal reads as follows:

1. A diesel-electric locomotive comprising:
 - a diesel engine connected to a generator;
 - a cable originating from the generator to supply electrical power to a drive unit; and
 - an additional cable originating from the generator to supply electrical power to secondary appliances, the additional cable including a transformer.

The Examiner rejected claims 1 to 8, 10 to 17, 19 and 20 under 35 U.S.C. § 103(a).

The prior art relied upon by the Examiner in rejecting the claims on appeal are:

Hamilton, Jr.	US 6,267,062	July 31, 2001
Brooks	US 6,523,654	Feb. 25, 2003

ANALYSIS

We have carefully reviewed the rejection on appeal in light of the arguments of the Appellant and the Examiner.

We find that Hamilton discloses a diesel-electric locomotive having a diesel engine 20 connected to a generator 30. A power cable 32 transfers power from the generator 30 to a drive cabinet 40 which in turn transfers variable frequency current to a traction motor 50 and to various secondary components such as lights. Hamilton does not disclose that the various secondary components operate at different voltages than that supplied by the

drive cabinet 40. It follows that Hamilton does not disclose that there is a need to provide a stepped down power from the generator to the various secondary components. Hamilton does not disclose transformer cables.

We find that Brooks discloses an electric locomotive including a transformer 7 which steps down the alternating power supply from a relatively high voltage trolley wire so as to be suitable for supply to the motor and the other electrical equipment on the train (col. 1, ll. 30 to 34).

The Examiner reasons that a person of ordinary skill in the art would have found it obvious to include a transformer as disclosed by Brooks in the Hamilton locomotive cable in order to properly operate various components, because the braking circuit of the locomotive *may* operate at a different voltage than components like radios and lighting systems. The Appellant contends that there is no need for a transformer in the Hamilton locomotive, because Hamilton discloses that the various components operate properly and Hamilton does not disclose that there is a need to step down the voltage in the Hamilton locomotive. In addition, Appellant argues that neither reference discloses a cable which includes a transformer and originates from the generator.

We agree with the Appellant that Hamilton does not disclose that the other components such as the lights operate on a different voltage than that supplied by the drive cabinet 40. As such, absent hindsight derived from Appellant's disclosure, there is no reason to provide a transformer in the Hamilton locomotive.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See *In re Fine*, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598

Appeal 2007-2260
Application 10/937,261

(Fed. Cir. 1988). In so doing, the Examiner must make the factual determinations set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966). Furthermore, "there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness" *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007) (quoting *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336 (Fed. Cir. 2006)).

There is no factual basis for the Examiner's assertion that the various components in Hamilton may operate on various voltages, and that therefore there is a need for a transformer in cable 32.

In addition, neither Hamilton nor Brooks discloses a cable with a transformer that originates from a generator.

In view of the foregoing, the decision of the Examiner is reversed.

REVERSED

JRG

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