



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

Table with 5 columns: APPLICATION NO., FILING DATE, FIRST NAMED INVENTOR, ATTORNEY DOCKET NO., CONFIRMATION NO.
13/270,842 10/11/2011 Andreas MATHIES HM-585-CON 8774

20311 7590 11/29/2016
LUCAS & MERCANTI, LLP
30 BROAD STREET
21st FLOOR
NEW YORK, NY 10004

Table with 1 column: EXAMINER

YEE, DEBORAH

Table with 2 columns: ART UNIT, PAPER NUMBER

1734

Table with 2 columns: NOTIFICATION DATE, DELIVERY MODE

11/29/2016

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

info@lmiplaw.com

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE PATENT TRIAL AND APPEAL BOARD

---

*Ex parte* ANDREAS MATHIES, DIRK SCHMIDT, GERHARD HORN,  
and ROMAN DEHMEL

---

Appeal 2015-002258  
Application 13/270,842  
Technology Center 1700

---

Before PETER F. KRATZ, KAREN M. HASTINGS, and  
MICHAEL P. COLAIANNI, *Administrative Patent Judges*.

HASTINGS, *Administrative Patent Judge*.

DECISION ON APPEAL

Appellants<sup>1</sup> seek our review under 35 U.S.C. § 134(a) of the Examiner's decision rejecting claims 1 and 3–9 under 35 U.S.C. § 103 as unpatentable over the combined prior art of Fujibayashi et al. (US 7,052,647 B2, issued May 30, 2006) (“Fujibayashi”) and Karlsson (DE 3313024 A1, published Oct. 18, 1984).<sup>2</sup>

We have jurisdiction over the appeal under 35 U.S.C. § 6(b).

We AFFIRM.

---

<sup>1</sup> The real party in interest is stated to be SMS Siemag Aktiengesellschaft (App. Br. 2).

<sup>2</sup> The Examiner formulates the rejection as either Fujibayashi in view of Karlsson, or, as Karlsson in view of Fujibayashi (e.g., Final Action 2).

Independent claim 1 is illustrative of the subject matter on appeal (emphasis added to highlight key limitation in dispute):

1. Method for controlled straightening and cooling of wide metal strip or sheet running out of a hot-rolled strip mill, with the use of pinch rolls, which are installed after (in the direction of strip flow) vertical double rolls and produce a tensile stress that acts in the longitudinal direction, wherein the metal strip or sheet is moved *from a pre-straightening machine immediately to a splash cooling installation* under defined conditions of tensile stress by adjustment of the tensile stress, and *that the metal strip or sheet is cooled inside the splash cooling installation between successive pairs of pinch rolls*, and the tensile stress is *additionally controlled by a feedback control system* that regulates the tensile stress by switching over throughput speed with respect to each successive pair of pinch rolls with progressive transit of the metal strip or of the sheet, the feedback control taking into consideration thickness and width of the strip or sheet and cooling intensity, whereby the metal strip or sheet is plastically deformed in the pre-straightening machine prior to entering the cooling installation.

Independent claim 5 is directed to a device corresponding to the one used in the method of claim 1 (Claims Appendix). Appellants' arguments focus on limitations common to both claims 1 and 5 (App. Br. 10–15). We select claim 1 as representative.

## ANALYSIS

Upon consideration of the evidence on this record and each of Appellants' contentions, we find that the preponderance of evidence

supports the Examiner's conclusion that the subject matter of Appellants' claims is unpatentable over the applied prior art. We sustain the Examiner's § 103 rejection(s) essentially for the reasons set out by the Examiner in the Answer in the Response to Argument section.

We add the following primarily for emphasis.

Appellants principal arguments in the Appeal Brief are 1) that the applied prior art does not teach or suggest the recited feedback control system (App. Br. 10); 2) the Examiner used impermissible hindsight (e.g., App. Br. 10, 11); 3) the use of successive pairs of pinch rolls inside the cooling section of Fujibayashi would not have been obvious to one of ordinary skill as "no need to do so" (App. Br. 12, *also*, App. Br. 11); 4) no plastic deformation is taught in Karlsson's "pre-straightening" section (App. Br. 13, 14). Appellants also contend that the Examiner did not give sufficient reasons why the Schmidt Declaration<sup>3</sup> evidence is insufficient to overcome the rejection (App. Br. 15, 16; Reply Br. *generally*).

It has been established that "the [obviousness] analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *KSR Int'l Co. v. Teleflex Inc.*, 550 U.S. 398, 418 (2007). Likewise, it is also well settled that a reference stands for all of the specific teachings thereof as well as the inferences one of ordinary skill in the art would have reasonably been expected to draw therefrom. *See In re Fritch*, 972 F.2d 1260, 1264–65 (Fed. Cir. 1992).

---

<sup>3</sup> Affidavit under 37 C.F.R. § 1.132, filed by one of the co-inventors, Dirk Schmidt, signed Jan. 29, 2014.

Appellants' arguments are not persuasive of reversible error. The Examiner aptly points out how all of the claim limitations are met or suggested by the applied prior art (Ans. 3–6). Indeed, Appellants state “[t]he presently claimed invention provides a new and unique design concept *that admittedly in hindsight might appear obvious.*” (App. Br. 11; emphasis added).

Appellants have not shown error in the Examiner's determination that one of ordinary skill would have appreciated that the use of a “pre-straightening” section before, as well as successive pair of pinch rolls within a cooling section with controlled alignment as exemplified by Karlsson in a cooling section such as depicted in Fujibayashi would have been *prima facie* obvious, as the changes appear to be no more than the predictable use of known prior art elements for their known functions, which is ordinarily *prima facie* obvious. Likewise, an artisan would have readily appreciated that it would have been obvious and within Karlsson's process/device to plastically deform metal strip running out of a hot-rolled strip mill prior to entering its cooling apparatus as Fujibayashi exemplifies this common practice (e.g., Ans. 5, 6). The use of feedback alignment control is suggested by Fujibayashi as well as by Karlsson's explicit use of a computer to control its process (e.g., Ans. 4; Fujibayashi col. 18, ll. 4–13, col. 19, ll. 37–43; Karlsson, pp. 23–30).

Further, Appellants have not asserted that the proposed modification of Fujibayashi based on Karlsson, or Karlsson based on Fujibayashi, would have been beyond the capabilities of a person of ordinary skill in the art. Absent such an assertion, we “take account of the inferences and creative steps that a person of ordinary skill in the art would employ,” and find a

person of ordinary skill in the art would have overcome any difficulties within their level of skill. *KSR*, 550 U.S. at 418; *see also id.* at 421 (“A person of ordinary skill is also a person of ordinary creativity, not an automaton.”); *Ball Aerosol & Specialty Container, Inc. v. Limited Brands, Inc.*, 555 F.3d 984, 993 (Fed. Cir. 2009) (under the flexible inquiry set forth by the Supreme Court, the PTO must take account of the “inferences and creative steps,” as well as routine steps, that an ordinary artisan would employ)).

As the Examiner de facto pointed out, Appellants do not provide any specific factual evidence in the Schmidt Affidavit, rather the affidavit merely supports/repeats some of the arguments set out in the Appeal Brief, or vice versa (e.g., Ans. 6), and/or gives an opinion on the ultimate legal conclusion. For example only, the Schmidt Affidavit states that an artisan “would not [have] be[en] motivated” to provide successive pairs of pinch rolls in Fujibayashi (Affidavit 9), because Fujibayashi has only one pair of pinch rolls. The Examiner addresses this argument, pointing out that Fujibayashi expressly describes that a pair of pinch rolls may be located in the cooling installation (Ans. 3; discussing Fuji col. 18, ll. 8–13). The Examiner relies upon Karlsson for the obviousness of using multiple pairs of pinch rolls in a cooling/quenching operation (Ans. 3), and also points out that Karlsson may serve as the primary reference modified using Fujibayashi’s teachings (e.g., Ans. 5, 6).

Since the Schmidt Affidavit does not contain any reasonably specific factual support for its opinions, we give more weight to the publications than the testimony of an interested party. We discern no reversible error in the Examiner’s assessment of the weight to be given to the submitted evidence.

Appeal 2015-002258  
Application 13/270,842

*Yorkey v. Diab*, 601 F.3d 1279, 1284 (Fed. Cir. 2010) (The Board has discretion to give more weight to one item of evidence over another “unless no reasonable trier of fact could have done so”). *See also In re Am. Acad. of Sci. Tech. Ctr.*, 367 F.3d 1359, 1368 (Fed. Cir. 2004) (“[T]he Board is entitled to weigh the declarations and conclude that the lack of factual corroboration warrants discounting the opinions expressed in the declarations.”); *Velander v. Garner*, 348 F.3d 1359, 1371 (Fed. Cir. 2003) (“In giving more weight to prior publications than to subsequent conclusory statements by experts, the Board acted well within [its] discretion.”).

Accordingly, we affirm the Examiner’s prior art rejections of the claims under 35 U.S.C. § 103(a) for the reasons given above and presented by the Examiner.

#### DECISION

The Examiner’s § 103 rejections are affirmed.

#### TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED