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EXAMINER
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte CHAODONG LIU, SHANHONG ZHOU, HAIFEI XU, YI SUN, and YINHE CUI

Appeal 2020-006403
Application 15/510,372
Technology Center 1700

BEFORE BEVERLY A. FRANKLIN, JENNIFER R. GUPTA, and JANE E. INGLESE, *Administrative Patent Judges.*

FRANKLIN, *Administrative Patent Judge.*

DECISION ON APPEAL

STATEMENT OF THE CASE

Pursuant to 35 U.S.C. § 134(a), Appellant[1] appeals from the Examiner's decision to reject claims 1–5 under 35 U.S.C. § 103 as being unpatentable over Yi. We have jurisdiction under 35 U.S.C. § 6(b). We reverse.

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[1] We use the word Appellant to refer to "applicant" as defined in 37 C.F.R. § 1.42. Appellant identifies the real party in interest as CHINA ALUMINUM INTERNATIONAL ENGINEERING CORPORATION LIMITED. Appeal Br. 3.

CLAIMED SUBJECT MATTER

Claim 1 is illustrative of Appellant's subject matter on appeal and is set forth below:

> 1. A pot furnace low-temperature calcination method comprising:
>
> providing a pot;
>
> providing a flame path proximate to the pot such that heat from the flame path heats the pot;
>
> controlling a flame path temperature and discharge rate of the pot furnace such that petroleum coke is calcined in the pot at a temperature range from 1150°C to 1220°C, the discharge rate of the pot being controlled to be 110~120 kg/h; and
>
> reducing an amount of desulfurization of the petroleum coke during calcination so that true density of the calcined coke is between 2.05 and 2.07g/cm^3;
>
> wherein the flame path temperature is controlled to be less than 1250°C.

REFERENCE

The prior art relied upon by the Examiner is:

Name	Reference	Date
Yi	[2]Sun Yi et al., *Comparison between Vertical Shaft Furnace and Rotary Kiln for Petroleum Coke Calcination*, Shenyang Aluminium and Magnesium Engineering and Research Institute, China Academic Journals Electronic Publishing House, pp. 38–42.	November 2010

[2] The Examiner's relies on the English-language translation of this article.

REJECTION

Claims 1–5 are rejected under 35 U.S.C. § 103 as being unpatentable over Yi.

OPINION

We review the appealed rejections for error based upon the issues Appellant identifies, and in light of the arguments and evidence produced thereon. *Ex parte Frye*, 94 USPQ2d 1072, 1075 (BPAI 2010) (precedential), *cited with approval in In re Jung*, 637 F.3d 1356, 1365 (Fed. Cir. 2011) ("[I]t has long been the Board's practice to require an applicant to identify the alleged error in the examiner's rejections."). Upon review of the evidence and each of the respective positions set forth in the record, we find that the preponderance of the evidence supports Appellant's position in the record. Accordingly, we reverse the Examiner's rejection on appeal essentially for the reasons set forth in the record by Appellant, and add the following for emphasis.

In a §103(a) obviousness rejection, the Patent Office has the initial burden of establishing a *prima facie* case. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. "When determining whether a claim is obvious, an examiner must make a searching comparison of the claimed invention, including all its limitations, with the teaching of the prior art." *In re Ochiai*, 71 F.3d 1565, 1572 (Fed. Cir. 1995). Thus, "obviousness requires a suggestion of all limitations in a claim." *CFMT, Inc. w Yieldup Intern. Corp*., 349 F.3d 1333, 1342 (Fed. Cir. 2003) (citing *In re Royka*, 490 F.2d 981, 985 (CCPA 1974)); *see also In re Wada and Murphy*, Appeal No. 2007–3733

(January 14, 2008) (a Board decision in support of the view that an examiner cannot skip a claim limitation when rejecting a claim as being obvious).

In the instant case, claim 1 requires, *inter alia*, the elements of controlling a flame path temperature and *discharge rate . . . the discharge rate of the pot being controlled to be 110~120 kg/h*" [emphasis added]. Appellant discusses these claim elements on page 10 of the Appeal Brief. On page 2 of the Reply Brief, Appellant argues, *inter alia*, that Yi does not teach this method step. We agree, and note that the rejection set forth on page 2 of the Final Office Action does not direct us to a finding regarding the claimed method step involving the discharge rate. In the Examiner's response made on page 3 of the Answer, the Examiner's position is that because Yi's product made has a density within the range claimed in claim 1, "no patentable difference is seen". Ans. 3. However, the claim is a method claim and not a product-by-process claim. Thus, it is the method step recitations that cannot be skipped in making an obviousness determination.

In view of the above, we reverse the rejection.

CONCLUSION

We reverse the Examiner's decision.

DECISION SUMMARY

In summary:

Claim(s) Rejected	35 U.S.C. §	Reference(s)/Basis	Affirmed	Reversed
1–5	103	Yi		1–5

REVERSED