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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte ALEXANDER Y. TETELBAUM

Appeal 2014-005271
Application 13/246,075
Technology Center 3600

Before: WILLIAM A. CAPP, AMANDA F. WIEKER and
ARTHUR M. PESLAK, *Administrative Patent Judges*.

CAPP, *Administrative Patent Judge*.

DECISION ON APPEAL

STATEMENT OF THE CASE

Appellant seeks our review under 35 U.S.C. § 134 of the final rejection of claims 1–14 as unpatentable under 35 U.S.C. § 103(a) over Iyer (US 2012/0284680 A1, pub. Nov. 8, 2012), West (US 2003/0122220 A1, pub. July 3, 2003), and Staib (US 2007/0130090 A1, pub. June 7, 2007). We have jurisdiction under 35 U.S.C. § 6(b).

We REVERSE.

THE INVENTION

Appellant's invention relates to a method of estimating a profit margin for an integrated circuit chip. Spec. ¶ 1. Claim 1, reproduced below, is illustrative of the subject matter on appeal.

1. A method of estimating a profit margin for an integrated circuit (IC) chip, comprising:
 - providing design, manufacturing and financial input data for the IC chip;
 - determining a ratio of performing to manufactured IC chips using chip yields apart from timing;
 - characterizing IC chip performance corresponding to clock timing and on-chip-variation (OCV) margins;
 - calculating, with a processor, price and costs corresponding to design, manufacturing and testing of the IC chip; and
 - generating a profit margin based on the price and costs.

OPINION

Unpatentability of Claims 1–10 over Iyer, West, and Staib

Claim 1

The Examiner finds that Iyer discloses the limitation in claim 1 directed to characterizing IC chip performance. Final Action 10. The Examiner relies on West for disclosing the limitations directed to providing financial input data for the IC chip, determining a ratio of performing to manufactured IC chips using chip yields, and calculating price and costs. *Id.* at 11–12. The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Iyer to include the scribe street seals and method of fabrication of West. *Id.* at 12. According to the Examiner, a person of ordinary skill in the art would have done this because several solutions have been proposed to

solve technical problems associated with the manufacture and dicing of semiconductor wafers. *Id.*

The Examiner further relies on Staib as disclosing generating a profit margin based on price and costs. *Id.* at 12–13. The Examiner concludes that it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify Iyer and West to further include the system for on-line merchant price setting of Staib. *Id.* at 14. According to the Examiner, a person of ordinary skill in the art would have done this because it is often difficult for merchants to know the price at which their competition is selling a particular product. *Id.*

Appellant traverses the Examiner’s rejection by arguing that West does not disclose calculating price and costs corresponding to design, manufacturing, and testing an IC chip. Appeal Br. 5.

In response, the Examiner states that calculating price and costs is a limitation that can be performed for any type of product. Ans. 25. The Examiner then directs our attention to paragraph 22 of Iyer which discusses estimating the value of removable pessimism from a static timing analysis. *Id.* (citing Iyer ¶ 22); *see also* Iyer ¶ 21. As further support for the factual findings underlying the rejection, the Examiner also directs our attention to paragraphs 30 and 34 of Iyer as well as paragraphs 16, 22, and 42 of West. Ans. 26–27.

We have reviewed the above cited passages relied on by the Examiner to support the rejection. Although the factors discussed in paragraphs 22, 30, and 34 of Iyer and paragraphs 16, 22, and 42 of West may, in some respects, affect the price and cost of an IC chip, we agree with Appellant that they do not fairly disclose “calculating price and costs” corresponding to

design, manufacturing, and testing an IC chip as claimed. In particular, the recited disclosures in West are directed to minimizing the sacrifice of material for dicing. West ¶¶ 16, 22, 42. We agree with Appellant that there is no disclosure in such paragraphs regarding calculating price and costs corresponding to design, manufacturing, and testing an IC chip, let alone disclosure of calculating price and costs in conjunction with the other recited method steps of providing financial input data for the IC chip and determining a ratio of performing to manufactured IC chips using chip yields, which the Examiner also asserts to be taught by West. Final Action 11–12 (citing West ¶¶ 2, 16, 22, 42).

Similarly, we find that the Examiner erred in finding that West satisfies the limitation directed to providing “financial input data” for the IC chip. Final Action 10–11 (citing West ¶ 16). Contrary to the Examiner’s finding, paragraph 16 of West discusses minimizing the sacrifice of semiconductor material for dicing. West ¶ 16. While this minimization of sacrifice in dicing may affect the economics of chip manufacture, there is no disclosure of “*providing financial input data*” within the meaning of claim 1.

With respect to the Examiner’s observation that calculating price and costs can be performed for any type of product, Ans. 25, we note that such observation is not supported by any citation to evidence in the record and the Examiner fails to explain how or why it would have been obvious to derive price and costs “*corresponding to design, manufacturing and testing of the IC chip*” in connection with “*providing design, manufacturing and financial input data*” and “*determining a ratio of performing to manufactured IC chips*” as claimed by Appellant. Final Action 4, 10–11.

In proceedings before the Patent and Trademark Office, the Examiner bears the burden of establishing a prima facie case of obviousness based upon the prior art. *In re Piasecki*, 745 F.2d 1468, 1471–72 (Fed. Cir. 1984). Here, we determine that the Examiner has failed to set out a prima facie case of unpatentability with respect to claim 1. Accordingly, we do not sustain the Examiner’s unpatentability rejection of claim 1.

Claims 2–10

Claims 2–10 depend, directly or indirectly, from claim 1. Claims App. The Examiner’s rejection of these claims suffers from the same infirmities that were identified above with respect to claim 1. Thus, for essentially the same reason expressed above in connection with claim 1, we do not sustain the rejection of claims 2–10.

*Unpatentability of Claims 11–14
over Iyer, West, and Staib*

Claim 11

Claim 11 is an independent claim. Claims App. In rejecting claim 11, the Examiner relies on essentially the same findings of fact regarding West’s purported disclosure regarding “providing design, manufacturing, and financial input data” that we previously found to be erroneous in connection with the rejection of claim 1 and discussed further above. Final Action 26. Thus, the Examiner’s rejection of claim 11 suffers from the same infirmity that we previously discussed with respect to the rejection of claim 1, which includes a similar limitation.

Thus, for similar reasons as discussed above with respect to claim 1, we do not sustain the rejection of claim 11.

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Claims 12–14

Claims 12–14 depend from independent claim 11. Claims App. The Examiner’s rejection of these claims suffers from the same infirmity that was identified above with respect to claim 11. Thus, for essentially the same reason expressed above in connection with claim 11, we do not sustain the rejection of claims 12–14.

DECISION

The decision of the Examiner to reject claims 1–14 is reversed¹.

REVERSED

¹ Should there be further prosecution of this application (including any review for allowance), the Examiner may wish to review the claims for compliance under 35 U.S.C. § 101 in light of the examination instructions on patent eligible subject matter in light of *Alice Corporation Pty, Ltd. v. CLS Bank*, 134 S.Ct. 2347 (2014).