

Keywords: duplication of parts, per se, obvious, suggest to one of ordinary skill, modification

General: Patent examiner's reliance on per se rule that duplication of parts renders invention obvious fails to establish prima facie case that claimed semiconductor processing apparatus having multiple reactors in same processing chamber is obvious over prior art reference, since reliance on per se rules of obviousness is legally incorrect, and mere fact that prior art could be modified as proposed by examiner is not sufficient to establish prima facie case.

Ex parte Granneman

68 U.S.P.Q.2d 1219 (Bd. Pat. App. & Inter. 2003)
March 6, 2003

I. Facts

Applicants appealed from an Examiner's rejection under 35 U.S.C. § 103 as being unpatentable over Zinger alone or in view of Ohsawa or Nishi.

The appellants' claimed invention is directed toward semiconductor processing apparatus having multiple reactors and a boat transfer mechanism in the same processing chamber. For example, the language of rejected Claim 31 of the application is illustrative:

31. A semiconductor processing system for batch processing of substrates in boats, comprising a substrate handling chamber, a boat transfer mechanism occupying a defined footprint within a process chamber sealable from the substrate handling chamber, at least two reactor vessels occupying the same defined footprint, and a boat lift mechanism for lifting boats from the boat transfer mechanism into one of the reactor vessels.

Zinger discloses a semiconductor processing apparatus differing from that claimed by appellants only in that Zinger's processing chambers each contain only one reactor and lift mechanism. Zinger's apparatus requires modification by including a second reactor in the processing chamber to arrive at appellant's claimed apparatus. Accordingly, the Examiner argued in reliance upon *In re Harza*, 274 F.2d 669, 124 U.S.P.Q. 378 (C.C.P.A. 1960), that adding a reactor in Zinger's processing chamber would be a mere duplication of parts and therefore obvious. However, the Examiner failed to compare the facts of *Harza* with those of the present case and to explain why, based on such a comparison, the legal conclusion in the present case should be the same as that in *Harza*. Instead, the Examiner relied on *Harza* as establishing a *per se* rule that duplication of parts is obvious.

The Examiner asserted that Ohsawa and Nishi teach multiple reactor mechanisms. Further, the Examiner asserted that it would have been obvious to one of ordinary skill in the art to implement the multiple reactor mechanisms taught by Ohsawa and Nishi in the processing chamber of Zinger to simultaneously treat more than one wafer in the processing chamber.

II. Issues

- A. May the Examiner rely on a *per se* rule that duplication of parts is obvious?
- B. Has the Examiner established a *prima facie* case of obviousness over Zinger alone?
- C. Has the Examiner established a *prima facie* case of obviousness over the combined teachings of Zinger and Ohsawa or Nishi?

III. Discussion

- A. No. As stated by the Federal Circuit in *In re Ochiai*, 71 F.3d 1565, 1572, 37 U.S.P.Q.2d 1127, 1133 (Fed. Cir. 1995), “reliance on *per se* rules of obviousness is legally incorrect and must cease.”
- B. No. Zinger uses multiple one-reactor processing chambers rather than multiple reactors within each processing chamber. Because the Examiner failed to explain why the Zinger reference itself would fairly suggest the desirability of using multiple reactors within a processing chamber rather than multiple one-reactor processing chambers, there is no *prima facie* case of obviousness.
- C. No. The Examiner did not show any teaching suggesting the use of multiple reactors in Zinger’s processing chamber. The Examiner’s argument regarding the combination of Zinger with Ohsawa or Nishi is no different than the Examiner’s argument regarding Zinger alone. The Examiner merely relied on Ohsawa and Nishi as evidence that semiconductor processing apparatus having multiple reactors were known in the art.