

**Keywords:** double patenting; obviousness analysis

**General:** An obviousness-type double patenting analysis does not always require a full Graham obviousness analysis.

*In re Basell Poliolefine Italia S.P.A.*

514 F.3d 1371, 89 U.S.P.Q.2d 1030 (Fed. Cir. 2008)

Decided November 13, 2008

## **I. Facts**

Basell Poliolefine Italia, S.P.A. ("Basell") appealed, to the Federal Circuit, from decisions of the United States Patent and Trademark Office ("PTO") Board of Patent Appeals and Interferences ("Board") resulting from a Director-ordered reexamination of U.S. Patent 6,365,687 ("the '687 patent"). The Board affirmed the rejections of all the claims of the '687 patent as unpatentable under 35 U.S.C. §§ 102(b) and 103(a) and the doctrine of obviousness-type double patenting.

The '687 patent, entitled "Process for the Polymerization and Copolymerization of Certain Unsaturated Hydrocarbons," issued on April 2, 2002. The '687 patent claims priority to an Italian patent application filed July 27, 1954. The invention relates to "a process for copolymerizing unsaturated hydrocarbons of the formula  $\text{CH}_2=\text{CHR}$  in which R is a saturated aliphatic radical with two or more carbon atoms or a cycloaliphatic radical, in the presence of a catalyst comprising a catalytic aluminum alkyl compound and a catalytic titanium halide compound." The Federal Circuit focused on claims 1 and 9, asserting them as representative claims. The pending claims generally involve polymerizing any alpha-olefin C4 or higher with any olefin (in some claims, specifically ethylene) using a titanium halide catalyst and an aluminum alkyl co-catalyst.

On June 7, 2002, the PTO initiated a Director-ordered reexamination. The reexamination was for all claims based on double patenting in view of four expired patents including U.S. Patent No. 3,582,987 ("the '987 patent"). On March 30, 2005, the Board affirmed the double patenting rejections.

On appeal, Basell argued that the Board erred in rejecting the claims for obviousness-type double patenting in view of the '987 patent. Basell argued that the Board erred because it failed to conduct an analysis under *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In response, the Director argued that contrary to Basell's assertion, an obviousness-type double patenting analysis does not always require a full Graham obviousness analysis.

## **II. Issue**

Did the Board err in sustaining the obviousness-type double patenting rejection of the '687 patent over the '987 patent?

## **III. Discussion**

No. The Federal Circuit agreed with the Board's conclusion that the claims of the '687 patent are not patentably distinct from claim 1 of the '987 patent. The court agreed with the Director that the claims of the '687 patent are unpatentable based on obviousness-type double patenting in view of the '987 patent. They stated that the critical inquiry was whether the claims of the '687 patent define an obvious variation of the claims of the '987 patent.

"The doctrine of double patenting is intended to prevent a patentee from obtaining a time-wise extension of [a] patent for the same invention or an obvious modification thereof." *In re Lonardo*, 119 F.3d 960, 965 (Fed. Cir. 1997). The judicially created doctrine of obviousness-type double patenting "prohibit[s] a party from obtaining an extension of the right to exclude through claims in a later patent that are not patentably distinct from claims in a commonly owned earlier patent." *Eli Lilly and Co. v. Barr Labs., Inc.*, 251 F.3d 955, 967 (Fed. Cir. 2001). In determining double patenting, a one-way test is normally applied, in which

"the examiner asks whether the application claims are obvious over the patent claims." *In re Berg*, 140 F.3d 1428, 1432 (Fed. Cir. 1998).

Claim 1 of the '687 patent covers polymerizing 1) an alpha-olefin of C4 or higher, 2) with ethylene, 3) using a titanium halide aluminum alkyl catalyst. According to the Federal Circuit, as the Director and the Board correctly noted, the claim encompassing those limitations is an obvious variant of claim 1 of the '987 patent. Specifically, with regard to the alpha olefin of C4 or higher, claim 1 of the '987 patent provides that one of the monomeric materials may include "unsaturated hydrocarbons of the formula  $\text{CH}_2=\text{CHR}$  in which R is selected from the group consisting of saturated aliphatic radicals containing 1 to 4 carbon atoms." Thus, both claims of the '987 patent and the '687 patent cover alpha olefins of C4 to C6. In addition, with regard to ethylene, claim 1 of the '987 patent recites "another olefinic monomer," and thus covers a genus that includes ethylene. Similarly, with regard to the titanium halide aluminum alkyl catalyst, claim 1 of the '987 patent covers a genus that the parties do not dispute includes titanium halide, as well as a genus that includes aluminum alkyl. Claim 1 of the '687 patent is thus not patentably distinct from claim 1 of the '987 patent. Similarly, according to the Federal Circuit, claim 9 of the '687 patent, which does not limit one of the starting monomeric materials to ethylene but instead covers a broader class of olefin molecules, is not patentably distinct from claim 1 of the '987 patent because that claim likewise covers a broad class of olefinic monomers.

In essence, the claims of the '987 and '687 patents consist of various permutations of polymerization of olefins with various numbers of carbon atoms using catalysts of titanium halides and aluminum alkyls. Some expressions are generic to others. While it is true that a generic expression does not render obvious all of the species that it encompasses, these claims are both generic and specific to each other in interchangeable ways, involving the same groups of species.

Moreover, the specification of the '987 patent itself refers to ethylene, propylene, butene, and other olefins which indicates that those olefins were intended to fall within the meaning of the claims. Thus, the PTO had good basis for its conclusion that the claims of the '987 patent rendered obvious the claims of the '687 patent and that the latter claims are invalid for obviousness-type double patenting.

The Federal Circuit was unpersuaded by Basell's assertion that the double patenting rejection should be reversed because the Board failed to expressly conduct a full Graham analysis in determining that the '687 patent claims were an obvious variant of claim 1 of the '987 patent. Indeed, "this court has endorsed an obviousness determination similar to, but not necessarily the same as, that undertaken under 35 U.S.C. § 103 in determining the propriety of a rejection for double patenting." *In re Braat*, 937 F.2d 589, 592-93 (Fed. Cir. 1991). Hence, the Federal Circuit found no basis for reversing the Board's decision merely because the Board failed to expressly set forth each of the Graham factors in its analysis. Particularly, the court noted that the Board carefully considered claim 1 of the '987 patent and the claims of the '687 patent and determined that a person of ordinary skill in the art would have found the '687 patent claims to have been obvious, and the court found no error in this analysis.

#### **IV. Conclusion**

The appellant argued that the Board's decision on double patenting should be reversed because the Board failed to expressly conduct a full Graham analysis in determining that the claims of the later patent defined an obvious variant of the claims of the earlier patent. The court rejected this argument, noting that a full Graham analysis is not necessarily required: "this court has endorsed an obviousness determination similar to, but not necessarily the same as, that undertaken under 35 U.S.C. § 103 in determining the propriety of a rejection for double patenting." *In re Braat*, 937 F.2d 589, 592-93 (Fed. Cir. 1991)."