

The opinion in support of the decision being entered today was not written for publication in a law journal and is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

Ex parte ROBERT JAMES JORGENSEN

---

Appeal No. 2002-0681  
Application No. 09/353,207<sup>1</sup>

---

ON BRIEF

---

Before PAK, WARREN, and KRATZ, Administrative Patent Judges.

PAK, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal under 35 U.S.C. § 134 from the examiner's final rejection of claims 7 through 12 which are all of the claims pending in the above-identified application.

---

<sup>1</sup> Application for patent filed July, 14, 1999.

APPEALED SUBJECT MATTER

Claim 7 is representative of the subject matter on appeal and reads as follows:

7. A process comprising contacting ethylene or ethylene and one or more comonomers in one or more fluidized bed reactors, under polymerization conditions, with a catalyst system comprising (i) a supported or unsupported magnesium/titanium based precursor in slurry form, said precursor containing an electron donor; and (ii) an activator containing aluminum in an amount sufficient to essentially complete the activation of the precursor, the method comprising:

- A) mixing the precursor and the activator prior to introduction into the reactor in at least one mixing procedure to prepare a partially activated precursor;
- B) continuously mixing the partially activated precursor with the remainder of the activator to essentially complete the activation of the precursor and to prepare an essentially completely activated precursor;
- C) maintaining the mixture from (A) in slurry form; and
- D) introducing the mixture from (B) into the reactor with the following provisos:

(i) the atomic ratio of aluminum to titanium is in the range of about 1:1 to about 15:1, and the mole ratio of activator to electron donor is about 1:1 to about 2:1;

(ii) the activator is one compound or a mixture of two different compounds;

Appeal No. 2002-0681  
Application No. 09/353,207

(iii) each activator compound has the formula  $Al(R_n)X_{(3-n)}$  wherein each R is independently a saturated aliphatic hydrocarbon radical having 1 to 14 carbon atoms; each X is independently chlorine, bromine, or iodine; and n is 1 to 3; and

(iv) no additional activator is introduced into the reactor(s).

PRIOR ART

The examiner relies on the following sole prior art reference:

Fowler et al. (Fowler) EP 0 771 820 May 07, 1997  
(Published European Patent Application)

REJECTION

Claims 7 through 12 stand rejected under 35 U.S.C. § 103 as unpatentable over the disclosure of Fowler.

We reverse.

For the reasons set forth at pages 4 through 9 of the Brief, we concur with the appellants that the examiner has not established that the claimed subject matter as a whole would have been obvious to one of ordinary skill in the art in view of Fowler within the meaning of 35 U.S.C. § 103. We only wish to emphasize that the examiner, on this record, has not demonstrated

that Fowler teaches or would have suggested the claimed continual mixing<sup>2</sup> until an essentially completely activated precursor is formed prior to introducing it into a polymerization reactor. In this regard, we observe that the examiner has not explained, much less proffered evidence, to show why the mere addition of an additional activator to a slurry containing partially activated precursor would constitute a suggestion to continually mix and form an essentially completely activated precursor in the slurry before that slurry is introduced into a polymerization reactor. *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992) ("the examiner bears the initial burden, on review of the prior art or on any other ground, of presenting a *prima facie* case of unpatentability"); *In re Fritch*, 972 F.2d 1260, 1266, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992) (the examiner must explain why the prior art would have suggested to one of ordinary skill in the art the desirability of the modification).

---

<sup>2</sup> According to page 12 of the specification, the claimed continual mixing is carried out with a mixing device, such as a static mixer, until essentially complete activation of the partially activated precursor is accomplished prior to introducing it into a polymerization reaction.

Appeal No. 2002-0681  
Application No. 09/353,207

In view of the foregoing, we are constrained to reverse the  
examiner's decision rejecting claims 1 through 9 under 35 U.S.C.  
§ 103.

REVERSED

CHUNG K. PAK	)	
Administrative Patent Judge	)	
	)	
	)	
	)	BOARD OF PATENT
CHARLES F. WARREN	)	APPEALS AND
Administrative Patent Judge	)	INTERFERENCES
	)	
	)	
	)	
PETER F. KRATZ	)	
Administrative Patent Judge	)	

CKP:vsh

Appeal No. 2002-0681  
Application No. 09/353,207

WHYTE HIRSCHBOECK DUDEK S.C.  
111 E. WISCONSIN AVE  
SUITE 2100  
MILWAUKEE, WI 53202