



(51) International Patent Classification:

C07F 5/02 (2006.01) C08F 4/643 (2006.01)
C07C 211/48 (2006.01) C08F 10/14 (2006.01)

(21) International Application Number:

PCT/US2021/062085

(22) International Filing Date:

07 December 2021 (07.12.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

17/141,874 05 January 2021 (05.01.2021) US

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(54) Title: ISOHEXANE-SOLUBLE UNSATURATED ALKYL ANILINIUM TETRAKIS(PERFLUOROARYL)BORATE ACTIVATORS

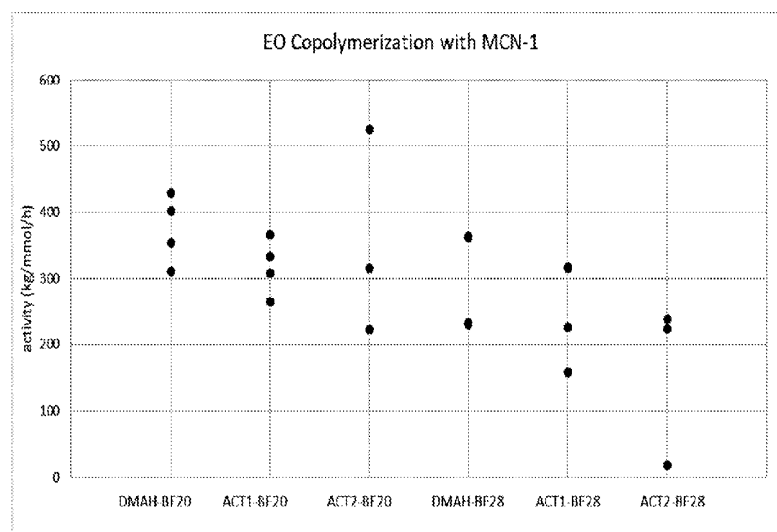


Fig. 1

(57) **Abstract:** The present disclosure describes highly soluble activators for use in olefin polymerization processes. These activators are ionic ammonium borates and have the general formula $[Ar(ER^1R^2H)(R^3)][tetrakis(perfluoroaryl)borate]$ where Ar is an aromatic group; E is nitrogen or phosphorous; R^1 is independently selected from aliphatic hydrocarbyl groups containing 1 to 30 carbon atoms, preferentially methyl; R^2 and R^3 are independently selected from aliphatic hydrocarbyl groups containing 10 to 30 carbon atoms and at least one internal olefin. The inventive activators dissolve in isohexane or methylcyclohexane at 25 °C to form homogeneous solutions of at least 10 mM concentration. When combined with a group 4 metallocene to form an active olefin polymerization catalyst, the inventive activators are shown to have activity similar to controls.

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MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,
TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Declarations under Rule 4.17:

- *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*
- *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

Published:

- *with international search report (Art. 21(3))*