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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))*

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(54) **Title:** BASE OIL COMPOSITION COMPRISING OLIGOMERIZED OLEFINS

(57) **Abstract:** We provide a base oil, comprising one or more oligomerized olefins, wherein the base oil has: a. a kinematic viscosity at 100 °C greater than 2.9 mm²/s; b. a viscosity index from 25 to 90; and c. a cloud point less than -55 °C. We provide a base oil made by oligomerizing propylene in an ionic liquid catalyst, where the base oil has a viscosity index from 25 to 90 and the base oil is colorless. We also provide a base oil made by oligomerizing an olefin feed comprising propylene in an acidic alkylpyridinium chloroaluminate ionic liquid, wherein the base oil has a viscosity index at 100 °C greater than 2.9 mm²/s, a viscosity index from 25 to 90, and a cloud point less than -55 °C.

