TECHNOLOGY OFFER

A PROCESS FOR THE PRODUCTION OF END-SATURATED POLYALFAOLEFIN LUBRICANTS

The commercial production of saturated polyalphaolefins (PAOs) requires a hydrogenation process, high hydrogen pressure and harsh conditions. This new green and single-step method produces PAOs in a fast, efficient and benign ways, compared to previous processes in the literature.

DESCRIPTION OF THE TECHNOLOGY

The invention associates to a catalyst system and an efficient method for the production of saturated polyalphaolefins (PAOs) by chain coordination transfer oligomerization (CCTO) technique. PAOs derive from the chemical transformation, in a single reactor, of alkene monomers, a type of hydrocarbons. This unique procedure presumes to be waste efficient compared to current approaches.

APPLICATION AND OBJECTIVE MARKET

All the countries and major suppliers that use PAOs could benefit from this novel technique, for the production of automobile and engine oils.

COMPETITIVE ADVANTAGES

Compared with previous and current methodologies, this innovative system can:

- Increase the efficiency by reducing it into a two-step process.
- Reduce the hazardousness and corrosiveness of the process.
- Reduce the high risks of PAO production.