

Patents

Research Report ਛੋ



INVENTORS: MIRCI LIVIU-EDUARD PATENT NO. 128215/2013

Biodegradable synthetic lubricants and process for preparing the same



The invention relates to a synthetic lubricant and to a process for preparing the same. According to the invention, the lubricant has the general formula R-COO-R-OOC-(CH)-COO-R-OOC-Rwhere l: Ris an ethylene glycol radical and Ris an oleic radical of the formula: CH-(CH)-CH=CH-(CH)-, having a viscosity index in the range of 188...220, a fire point of 232...297 DEG C, a flowing point of -14...+28 DEG C, a wear spot diameter of 0.4...0.7 mm as related to the basic oil and of 0.35...0.66 mm for the adittivated oil.; The process, as claimed by the invention, consists, in a first stage, in contacting the sebacic oil with 2.01...2.1 mole ethylene glycol, in the presence of an aromatic solvent, in auto catalytic or catalytic system, extracting the reaction water for 10...150 h, followed by cooling the reaction mass down to 50...60 DEG C and, in a second stage, admixing the oleic acid in a stoichiometric ratio in relation with the diester, extracting the water for 10...95 h, removing the solvent from the installation, devolatilization under vacuum, treatment with active carbon and filtration.



The regular alternation or successive distribution principle, "the myriapod" concept

Research Report ਙ

INVENTORS: ICLĂNZAN TUDOR-ALEXANDRU, STAN DANIEL VOICU PATENT NO. 123528/2013



Heated channel injection mould

The invention relates to an injection nozzle with closing needle comprised in heated channel moulds which are employed for manufacturing pieces of polymeric materials or thermoplastic composites and is intended to additionally heat the melt and seal the injection point, after the mould filling. According to the invention, the mould is provided, in front of the injection cavity, with an ante-chamber (2) and a final normalized injection nozzle (3) which is coaxial with an ultrasound assembly (A) with axial motion possibility whereto there is attached a needle-rod (4) having the role of ultrasonic wave guide concentrator and being provided with a side surface (f) along which the melt flows, as well as with a terminal tapered zone (c) ensuring the sealing of the nozzle (3) in the injection point (b), after filling the cavity.

