

Title (en)  
HYBRID BEARINGS

Title (de)  
HYBRIDLAGER

Title (fr)  
PALIER HYBRIDE

Publication  
**EP 2005017 A1 20081224 (EN)**

Application  
**EP 07703392 A 20070212**

Priority  

- EP 2007001156 W 20070212
- EP 06251288 A 20060310
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Abstract (en)  
[origin: EP1832762A1] A polymerisation reactor 100 comprising a reactor housing containing a rotating device 101 which in use is rotated to circulate the contents of the housing, wherein at least one hybrid bearing 31, 32 is mounted to the rotating device to facilitate its rotation, said hybrid bearing comprising steel raceways 40 and ceramic balls 42. The use of hybrid bearings in such apparatus is unconventional due to the harsh environment of the reactor and the low rotational speeds at which the rotating device operates (below 1000rpm). The hybrid bearings are operated without a dedicated lubrication source. The hybrid bearings can be thrust bearings arranged in tandem and can be used in conjunction with a ceramic bearing which rests on the hybrid bearing.

IPC 8 full level  
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Citation (search report)  
See references of WO 2007104395A1

Citation (examination)  

- US 5758965 A 19980602 - GAMBRILL JEFFREY S [US], et al
- DE 19728450 A1 19980115 - GELLERT JOBST U [CA]
- EP 1470856 A1 20041027 - MAVAG VERFAHRENSTECH AG [CH]
- DE 20114076 U1 20011025 - HEBOLD GMBH & CO KG APP UND AN [DE]

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