

Title (en)
SLEEVES, THEIR PREPARATION, AND USE

Title (de)
HULSEN, DEREN HERSTELLUNG UND VERWENDUNG

Title (fr)
MANCHONS, LEUR PREPARATION ET UTILISATION

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Application
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Abstract (en)
[origin: WO9735677A1] This invention relates to exothermic and/or insulating sleeves, their method of preparation, and their use. The sleeves are prepared by shaping a sleeve mix comprising (1) a sleeve composition capable of providing a sleeve, and (2) a chemical binder. The sleeves are cured in the presence of a catalyst by the cold-box or no-bake curing process. The invention also relates to a process for casting metal parts using a casting assembly where the sleeves are a component of the casting assembly. Additionally, the invention relates to the metal parts produced by the casting process.

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Citation (third parties)
Third party :
US 4240496 A 19801223 - GAMMAL TAREK EL [DE]

Cited by
DE102007012660A1; DE102008058205A1; DE102016211948A1; DE102007012660B4; DE202010007015U1; DE102012200967A1;
WO2010057464A3; DE102007031376A1; US10105755B2; WO2024058732A1; EP2489449A1; EP2823916A1; US9352385B2; EP3756788A1;
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DE 69716248 T2 20030807; DE 888199 T1 20000217; EP 0888199 A1 19990107; EP 0888199 A4 19990107; EP 0888199 B1 20021009;
ES 2134750 T1 19991016; ES 2134750 T3 20030301; FR 2746332 A1 19970926; FR 2746332 B1 19990528; GR 1003017 B 19981126;
GR 970100095 A 19971128; IE 970227 A1 20001004; IT 1290822 B1 19981211; IT MI970688 A1 19980925; JP 2000501028 A 20000202;
JP 3278168 B2 20020430; NL 1005627 A1 19971003; NL 1005627 C2 19980727; PL 183084 B1 20020531; PL 328966 A1 19990301;
ZA 972479 B 19980925

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US 9704628 W 19970321; AT 97916916 T 19970321; AU 2540697 A 19970321; BE 9700265 A 19970325; BR 9601454 A 19960325;
CA 2221778 A 19970321; DE 69716248 T 19970321; DE 97916916 T 19970321; EP 97916916 A 19970321; ES 97916916 T 19970321;
FR 9703600 A 19970325; GR 970100095 A 19970317; IE 970227 A 19970324; IT MI970688 A 19970325; JP 53451197 A 19970321;
NL 1005627 A 19970325; PL 32896697 A 19970321; ZA 972479 A 19970324