

Title (en)

Hot marking process for metallic parts

Title (de)

Heissmarkierungsverfahren für metallische Werkstücke

Title (fr)

Procédé de marquage à chaud de pièces métalliques

Publication

EP 0987069 B1 20040721 (FR)

Application

EP 99402111 A 19990825

Priority

FR 9811442 A 19980915

Abstract (en)

[origin: EP0987069A2] A product well known in chill casting or die casting, etc., and comprising an oily composition is deposited on the metallic, preferably aluminum, piece prior to hot marking. The composition is based on or is derived from at least one oil and/or one natural wax and/or one synthetic wax, and it may contain a solid material. The composition preferably comprises: (a) a mixture of 8-18C saturated and 18C unsaturated fatty acids derived from copra oil; or (b) a mixture of paraffin oils and synthetic wax. The composition may contain graphite or aluminum as solid material, which is present in the composition in amount 2-10 (preferably 6) weight %. A micro-stamping system comprising a ventilated marking head and an electromagnetically controlled stylet is used in the hot marking stage.

IPC 1-7

B21C 51/00; **B44C 1/24**

IPC 8 full level

B21C 51/00 (2006.01); **B44C 1/24** (2006.01)

CPC (source: EP)

B21C 51/005 (2013.01); **B44C 1/24** (2013.01)

Designated contracting state (EPC)

AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)

EP 0987069 A2 20000322; **EP 0987069 A3 20030129**; **EP 0987069 B1 20040721**; AT E271430 T1 20040815; DE 69918761 D1 20040826; DE 69918761 T2 20050721; ES 2221334 T3 20041216; FR 2783182 A1 20000317; FR 2783182 B1 20001027

DOCDB simple family (application)

EP 99402111 A 19990825; AT 99402111 T 19990825; DE 69918761 T 19990825; ES 99402111 T 19990825; FR 9811442 A 19980915