

Title (en)

PROCESS FOR HARDENING MOULDING SAND ARTICLES

Publication

EP 0313830 A3 19891213 (DE)

Application

EP 88115750 A 19880924

Priority

DE 3736775 A 19871030

Abstract (en)

[origin: US4886105A] A process is described for curing sand moldings, in particular casting cores, by the cold box process. In this process a catalyst containing gas mixture escaping from the mold is passed over a mixture feed side of a semipermeable membrane while a pressure is maintained on the permeate side of the membrane which is less than the pressure on the mixture feed side, whereby the catalyst vapors preferentially permeate through the membrane, and a permeate carrier gas stream which is, in particular, 50 to 300 liters greater than the permeate stream passing through the membrane per m² and per hour is passed over the permeate side of the membrane. The catalyst, in particular a tertiary amine, is greatly concentrated in the permeate carrier gas stream and can simply and inexpensively be removed from the latter by condensation. Inexpensive, virtually complete recovery of the expensive catalyst is possible using the process.

IPC 1-7

B22C 9/12

IPC 8 full level

B22C 9/12 (2006.01)

CPC (source: EP US)

B22C 9/123 (2013.01 - EP US)

Citation (search report)

- [AD] DE 2550588 B1 19760701 - DAIMLER BENZ AG
- [AD] US 4553983 A 19851119 - BAKER RICHARD W [US]
- [A] DE 2621153 A1 19771124 - DAIMLER BENZ AG

Designated contracting state (EPC)

AT BE CH ES FR GB IT LI SE

DOCDB simple family (publication)

US 4886105 A 19891212; AT E62839 T1 19910515; DE 3736775 C1 19880428; EP 0313830 A2 19890503; EP 0313830 A3 19891213; EP 0313830 B1 19910424; ES 2022563 B3 19911201; JP H02121750 A 19900509

DOCDB simple family (application)

US 26486788 A 19881031; AT 88115750 T 19880924; DE 3736775 A 19871030; EP 88115750 A 19880924; ES 88115750 T 19880924; JP 27597388 A 19881031