

## Title (en)

Feeder with exothermic feeder body and external insulation jacket

## Title (de)

Speiser mit exothermem Speiserkorporus und äußerer Isolierschale

## Title (fr)

Masselotte dotée d'un corps d'alimentation exothermique et d'une enveloppe d'isolation extérieure

## Publication

**EP 2489449 A1 20120822 (DE)**

## Application

**EP 11001338 A 20110218**

## Priority

EP 11001338 A 20110218

## Abstract (en)

The feeder (10) comprises a feeder cavity (12) enclosing a feeder body (11) and comprising a peripheral side wall, a lid portion, a bottom portion having a feeder opening (16) for connection to a mold cavity, and a refractive core arranged at the bottom portion of the feeder. The feeder body comprises an exothermic and burning material for generating heat upon contact with the hot metal rising in the feeder cavity during the casting process. An outer surface, side walls and the lid portion of the feeder body is completely enclosed by a group comprising an insulating refractory material shell. The feeder (10) comprises a feeder cavity (12) enclosing a feeder body (11) and comprising a peripheral side wall, a lid portion, a bottom portion having a feeder opening (16) for connection to a mold cavity, and a refractive core arranged at the bottom portion of the feeder. The feeder body comprises an exothermic and burning material for generating heat upon contact with the hot metal rising in the feeder cavity during the casting process. An outer surface, side walls and the lid portion of the feeder body is completely enclosed by a group comprising an insulating refractory material shell (18). The shell directly rests on the outer surface of the feeder body consisting of the exothermic material. An air gap is left between the outer surface of the feeder body and the outside of the insulating shell. A layer of a heat-reflective material and an aluminum foil are arranged between the feeder body and the shell. The feeder body enclosing shell having a peripheral section engages toward the feed opening of the bottom region of the feeder body.

## Abstract (de)

Ein Speiser zum Einsetzen in eine beim Gießen von Metallen verwendete Gießform, mit einem einen Speiserhohlraum umschließenden Speiserkorporus, bestehend aus einer umlaufenden Seitenwand, einem Deckelbereich sowie einem eine Speiseröffnung als Verbindung zum Formhohlraum aufweisenden Bodenbereich, wobei der Speiserkorporus aus einem exothermen und bei Kontakt mit dem heißen, beim Gießprozess in den Speiserhohlraum aufsteigenden Metall hitzeerzeugend verbrennenden Material besteht, ist dadurch gekennzeichnet, dass der Speiserkorporus (11) auf seiner Außenseite zumindest bereichsweise von einer aus einem isolierenden feuerfesten Material bestehenden Schale (18) umschlossen ist.

## IPC 8 full level

**B22C 9/08** (2006.01)

## CPC (source: EP)

**B22C 9/088** (2013.01)

## Citation (applicant)

- EP 1184104 B1 20041201 - CHEMEX GMBH [DE]
- EP 0888199 B1 20021009 - ASHLAND INC [US]
- EP 1184104 B1 20041201 - CHEMEX GMBH [DE]
- WO 2008003478 A1 20080110 - LUENGEN GMBH AS [DE], et al
- DE 20112425 U1 20011018 - GTP SCHAEFER GIESTECHNISCHE PR [DE]

## Citation (search report)

- [X] WO 0027560 A1 20000518 - ASHLAND INC [US]
- [X] DE 102007012117 A1 20080918 - LUENGEN GMBH AS [DE]
- [X] FR 2648373 A1 19901221 - DAUSSAN & CO [FR]

## Cited by

WO2014083155A1; DE102015103593B3; CN105382241A; EP3756788A1; EP3756787A1

## Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

## Designated extension state (EPC)

BA ME

## DOCDB simple family (publication)

**EP 2489449 A1 20120822; EP 2489449 B1 20151202**

## DOCDB simple family (application)

**EP 11001338 A 20110218**