

Title (en)
Metal-flow impact pad and diffuser for tundish

Title (de)
Pralltopf und Diffusor für eine Zwischenpfanne

Title (fr)
Élément d'impact par écoulement de métal et diffuseur pour panier de coulée

Publication
EP 2537610 A3 20130227 (EN)

Application
EP 12173052 A 20120621

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• EP 11171203 A 20110623
• EP 12173052 A 20120621

Abstract (en)
[origin: EP2537609A1] The invention relates to a diffuser for use in a tundish and made of a refractory material comprising (a) a base portion having a top surface and a bottom surface, wherein said top surface is an impact surface suitable for withstanding the impact of molten metal; and (b) an outer side wall entirely surrounding said base portion and extending from said top surface of said base portion in order to form a substantially bucket-like structure, and characterised in that said outer side wall comprises two or more flow outlets in the form of recesses extending from the edge of said side wall furthest away from said base portion towards but not up to said base portion. The invention further relates to the use of a diffuser in the process of pouring molten metal through a tundish.

IPC 8 full level
B22D 41/00 (2006.01)

CPC (source: EP)
B22D 41/003 (2013.01)

Citation (search report)
• [XY] US 2004070123 A1 20040415 - MORALES RODOLFO D [MX], et al
• [XDY] DE 19726540 A1 19981224 - GFT GES FUER FEUERFEST TECHNIK [DE]
• [YA] DE 10202537 C1 20030123 - INTOCAST AG FEUERFESTPRODUKTE [DE]
• [Y] US 2004041312 A1 20040304 - CONNORS CHARLES W [US]
• [Y] DE 10257395 A1 20040624 - WEERULIN FEUERFESTE PRODUKTE G [DE]
• [AD] US 5169591 A 19921208 - SCHMIDT MANFRED [US], et al
• [AD] EP 1397221 B1 20090729 - VESUVIUS CRUCIBLE CO [US]
• [Y] US 5518153 A 19960521 - ZACHARIAS DONALD R [US], et al
• [Y] US 6159418 A 20001212 - ZACHARIAS DONALD R [US]
• [Y] US 2003183362 A1 20031002 - ZACHARIAS DONALD RICHARD [US], et al

Cited by
CN110479995A

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