

Title (en)
MOLTEN METAL LADLE

Title (de)
METALLSCHMELZENPFANNE

Title (fr)
POCHE DE COULEE POUR METAL FONDU

Publication
EP 1832363 A4 20090107 (EN)

Application
EP 05793202 A 20051014

Priority
• JP 2005018925 W 20051014
• JP 2004379356 A 20041228

Abstract (en)
[origin: EP1832363A1] An object of the present invention is to provide a molten metal ladle in which scales, slag, etc., that adhere to the lining surface can be removed easily and reliably. The present invention provides a molten metal ladle provided with a bottomed tubular ladle body having an opening on the top, wherein the ladle body (10) has an upper ladle portion (12) and a lower ladle portion (11); the upper ladle portion (12) being connected to the top end of the lower ladle portion (11); lining layers (17,18) being provided inside the upper ladle portion (12) and lower ladle portion (11); and the innermost surface of the lining layer (18) of the upper ladle portion (12) being formed as an inclined plane wherein the opening area decreases from the top of the lining layer (17) of the lower ladle portion (11) toward the edge of the opening (13).

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CPC (source: EP US)
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Citation (search report)
• [X] US 4107244 A 19780815 - OCHIAI TSUNEMI, et al
• [XY] JP 2003205361 A 20030722 - TAMASHIMA KEIKINZOKU KOGYO KK, et al
• [XY] JP H0390509 A 19910416 - JIA TECHNOL INC
• [DY] JP 2001287021 A 20011016 - DAIKI ALUMINIUM IND
• [X] DATABASE WPI Week 198335, Derwent World Patents Index; AN 1983-751966, XP002505413
• See also references of WO 2006070522A1

Cited by
CN105328176A

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DE PL

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EP 1832363 A1 20070912; EP 1832363 A4 20090107; CN 101065202 A 20071031; JP 2006181615 A 20060713; JP 3903321 B2 20070411;
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