

Title (en)

Method of preparing a shot of semi-solid metal

Title (de)

Verfahren zur Bereitstellung eines Schusses aus breiartigem Metall

Title (fr)

Procédé pour préparer un tronçon de métal à l'état pâteux

Publication

EP 0931607 B1 20080430 (EN)

Application

EP 97122594 A 19971220

Priority

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Abstract (en)

[origin: EP0931607A1] By determining an amount of a metal to be prepared into a slurry in its liquid state, thereafter applying a motion to the melted metal via a mechanical or physical means when at least a part of the melted metal reaches a temperature below the liquidus temperature and cooling the melted metal in a slurry preparing container to prepare the melted metal into a metal slurry in a semi-solid state, and by concurrently making the semi-solid metal slurry in the slurry preparing container with a shape to be kept almost unchanged, and feeding the semi-solid metal slurry in a state wherein the shape is nearly kept as it is into the shot sleeve/prechamber of the part making machine, a semi-solid metal slurry with the non-dendritic (spherical) primary crystal particles being fine and almost uniform can be fed into the part making machine, with no need of any specifically complex process but with a simple system and plain equipment. Thus, a shaped part with high quality can be produced. <IMAGE>

IPC 8 full level

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CPC (source: EP)

B22D 1/00 (2013.01); **B22D 17/007** (2013.01); **C22C 1/12** (2023.01)

Cited by

CN107186181A; EP1358956A1; EP1292409A4; EP2535126A1; EP1132162A1; EP1699583A4; CN100359027C; AU2004209884B2; US10316387B2; US10233515B1; US9617617B2; US10640846B2; US10022786B2; US10639707B2; US9481031B2; US10441999B2; WO2004070068A1; US7225858B2; US7368690B2

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