

Title (en)

SEMI-SOLID METAL FORMING METHOD

Title (de)

VERFAHREN ZUR FORMGEBUNG HALBFESTEN MATERIALS AUS METALL

Title (fr)

PROCEDE DE MISE EN FORME DE MATERIAUX METALLIQUES A L'ETAT SEMI-SOLIDE

Publication

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Application

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Abstract (en)

[origin: US5630466A] PCT No. PCT/FR95/00042 Sec. 371 Date Aug. 14, 1995 Sec. 102(e) Date Aug. 14, 1995 PCT Filed Jan. 13, 1995 PCT Pub. No. WO95/19237 PCT Pub. Date Jul. 20, 1995A blank is prepared of a thixotropic metal material and the blank is reheated to a semi-solid state to obtained a liquid fraction corresponding to a desired viscosity for shaping, while determining the power used in the reheating. The reheated blank is transferred to a forging press including a forging stamp or to a pressure die casting machine including an injection plunger. The resistance of the material to the forging stamp or the injection plunger is determined and defined as a set point value and the blank is shaped by the forging stamp or pressure die casting machine. A subsequent blank of the thixotropic metal material is shaped by the forging press or the pressure die casting machine, and the power used in reheating is regulated to maintain the resistance at the set point value.

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