

Title (en)
METHOD FOR PRODUCING METALLIC POWDERS CONSISTING OF IRREGULAR PARTICLES

Title (de)
VERFAHREN ZUR HERSTELLUNG VON METALLPULVER AUS SPRATZIGEN TEILCHEN

Title (fr)
PROCEDE DE PRODUCTION DE POUDRES METALLIQUES FORMEES DE PARTICULES IRREGULIERES

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Abstract (en)
[origin: WO03031103A1] The invention relates to the production of a metallic powder consisting of surface-fissured, so-called irregular particles, namely a water-atomised metallic powder. The aim of the invention is to obtain an irregular surface form of powder grains (23) in a narrow weight class and to impart a high porosity with a homogeneous distribution to the sintered body. To this end, in a first step, the pouring stream (2) is deviated in its flow direction and is enlarged on its surface, and in a second step, the surface-enlarged pouring stream (21) is deviated again its flow direction and is divided, and the liquid metallic particles (22) formed are accelerated, and in a third step, the displaced liquid metallic particles (22) are applied and divided, at an angle gamma of between 10 and 90° in relation to the displacement direction of the same, with a high speed current (51) formed at least partially from a liquid medium, and the particles (23) are then solidified. According to one embodiment of the invention, in order to reduce the overheating of the metal melt and/or to improve the quality of the metallic powder produced, the pouring stream (2) is deviated in its flow direction and a surface enlargement of the same (21) is carried out, in a first method step, and/or the surface-enlarged pouring stream (21) is deviated and divided, and the formed liquid metallic particles (22) are accelerated, in the second method step, with at least one current (6,31,41) formed from at least one heated gas or heated gas mixture.

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