

Title (en)
PROCESS FOR MANUFACTURING A PART COMPRISING ALUMINIUM

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES TEILS MIT ALUMINIUM

Title (fr)
PROCÉDÉ DE FABRICATION D'UNE PIÈCE COMPRENANT DE L'ALUMINIUM

Publication
EP 3999264 A1 20220525 (FR)

Application
EP 20737223 A 20200714

Priority
• FR 1908170 A 20190718
• EP 2020069916 W 20200714

Abstract (en)
[origin: WO2021009183A1] A process for manufacturing a part comprising aluminium is presented, which process comprises a step of selective laser sintering of a mixture comprising: a polymer powder for forming the matrix, a powder of a quasicrystalline aluminium alloy, and a powder of a first reinforcing compound forming a contact angle with a drop of polymer placed on the surface thereof of less than 90° and having a thermal conductivity at 20°C of less than 100 W/m.K. The mixture also comprises a powder of a second reinforcing compound, made of polymer, having a melting point (or decomposition temperature) higher than the melting point of the polymer of the matrix. The sum of the weight of the alloy and of the weight of the reinforcing compounds does not exceed 80% of the total weight of the mixture.

IPC 8 full level
B22F 3/105 (2006.01); **B29C 64/153** (2017.01); **B33Y 10/00** (2015.01); **B33Y 70/00** (2020.01); **B33Y 70/10** (2020.01); **B33Y 80/00** (2015.01); **C22C 1/04** (2006.01); **C22C 32/00** (2006.01)

CPC (source: EP US)
B22F 10/28 (2021.01 - EP US); **B22F 10/36** (2021.01 - EP US); **B29C 64/153** (2017.07 - EP); **B33Y 10/00** (2014.12 - EP US); **B33Y 70/10** (2020.01 - EP); **B33Y 80/00** (2014.12 - EP); **C22C 1/0416** (2013.01 - EP); **C22C 32/0094** (2013.01 - EP); **C22C 2200/06** (2013.01 - EP); **Y02P 10/25** (2015.11 - EP)

Citation (search report)
See references of WO 2021009183A1

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