

Title (en)
DETECTION AND LOCATION OF POWDER SPREADING ANOMALIES USING ACOUSTIC EMISSION MEASUREMENTS

Title (de)
ERKENNUNG UND ORTUNG VON PULVERVERTEILUNGSANOMALIEN MITTELS SCHALLEMISSIONSMESSUNGEN

Title (fr)
DETECTION ET LOCALISATION D'ANOMALIES D'ETALEMENTS DE POUDRE PAR MESURES D'EMISSIONS ACOUSTIQUES

Publication
EP 4168196 A1 20230426 (FR)

Application
EP 21736635 A 20210609

Priority
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• FR 2021051038 W 20210609

Abstract (en)
[origin: WO2021255367A1] Device (100) for manufacturing a part using a method of selective fusion or selective sintering on a powder bed (103) comprising a build plate (101) having a working surface (102) parallel to a first direction (X) and to a second direction (Y), on which surface the part is intended to be manufactured, a wiper (110) which is placed on the working surface and capable of moving and spreading the powder in the first direction on the working surface, characterised in that it further comprises: - at least two acoustic sensors (121, 122) which are fixed and spaced in the second direction on the wiper and capable of detecting an acoustic signal; - a laser range finder (130) pointing in the first direction and capable of determining a position of the wiper in the first direction; and - a control system (140) capable of detecting an anomaly (150) on the basis of the acoustic signal and of determining a position of the anomaly on the basis of the acoustic signal detected by the acoustic sensors and a position signal measured by the laser range finder.

IPC 8 full level
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