

Title (en)
PRODUCTION OF A SELF-SUPPORTING METAL LAYER

Title (de)
HERSTELLUNG EINER FREITRAGENDEN METALLSCHICHT

Title (fr)
FABRICATION D'UNE COUCHE MÉTALLIQUE NON SOUTENUE

Publication
EP 4177377 A1 20230510 (DE)

Application
EP 21206111 A 20211103

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Abstract (en)
[origin: WO2023078641A1] The invention relates to a method for producing a metal film comprising the steps of applying a metal layer onto a substrate by means of aerosol deposition of a powder and at least partially or completely removing the substrate to obtain a film. The method is particularly suitable for processing brittle metals such as for example tungsten to metal films.

Abstract (de)
Die Erfindung betrifft ein Verfahren zur Herstellung einer Metallfolie aufweisend die Schritte, Auftragen einer Metallschicht auf ein Substrat mittels Aerosol-Deposition eines Pulvers und zumindest teilweises oder vollständiges Entfernen des Substrats unter Erhalt einer Folie. Das Verfahren ist insbesondere dazu geeignet spröde Metalle wie beispielsweise Wolfram zu Metallfolien zu verarbeiten.

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Citation (search report)

- [X1] US 2020207069 A1 20200702 - COUPLAND DUNCAN ROY [GB], et al
- [XA1] DE 102016119340 A1 20180412 - HERAEUS SENSOR TECHNOLOGY GMBH [DE]
- [I] WO 2020167716 A1 20200820 - QSA GLOBAL INC [US], et al
- [I] WO 2020097118 A1 20200514 - UTILITY GLOBAL INC [US]
- [YA] US 2018178332 A1 20180628 - ROBERGE GARY D [US], et al
- [A] EP 3339475 A1 20180627 - UNITED TECHNOLOGIES CORP [US]
- [YA] I. VERENA LUCK: "Heraeus makes the coating method Aerosol Deposition available for industrial use", 22 June 2021 (2021-06-22), XP002805787, Retrieved from the Internet <URL:https://www.heraeus.com/en/group/press_group/corporate_news/2021_1/06_aerosoldeposition.html> [retrieved on 20220223]

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