

Title (en)

Method and apparatus for making metallic glass powder.

Title (de)

Verfahren und Vorrichtung zum Herstellen metallischen Glaspulvers.

Title (fr)

Procédé et appareil pour fabriquer des poudres de métaux amorphes.

Publication

EP 0017723 A1 19801029 (EN)

Application

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Abstract (en)

A method for making metallic glass powder is disclosed, which involves atomizing a jet (54) of molten glass forming metal alloy by impinging with a moving body to form a stream of discrete molten droplets (64) of the metal alloy, followed by impinging that stream (64) on a travelling chill surface (66) to effect rapid solidification of the molten droplets (64). The powder can be fabricated into solid articles.

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IPC 8 full level

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Citation (search report)

- DE 899748 C 19531214 - JOHANNES JANSEN
- DE 460898 C 19280607 - HARTSTOFF METALL AKT GES HAMET
- DE 2127563 A1 19721214 - BATTELLE INSTITUT E V
- EP 0000926 A1 19790307 - BATTELLE DEVELOPMENT CORP [US]
- DE 2553131 A1 19760812 - SKF KUGELLAGERFABRIKEN GMBH
- US 3963812 A 19760615 - SCHLIENGER MAX P
- US 3881542 A 19750506 - POLK DONALD E, et al
- US 3856513 A 19741224 - CHEN H, et al
- US 2825108 A 19580304 - POND ROBERT B
- US 3297436 A 19670110 - EDGARD DUWEZ POL
- ZEITSCHRIFT FUR METALLKUNDE, Vol. 63, Nr. 3, 1972 Stuttgart H. WARLIMONT "Extrem schnelle Erstarrung pages 113 to 118 * page 116 *

Cited by

US7905115B2; CN116586620A; EP1002603A1; CN113828780A; EP0339478A3; EP0345921A3; DE3120169A1; CN114192790A; CN111438367A; CN113319286A; WO2018035202A1; US10926333B2; US11213890B2; US11607731B2; WO2023082493A1

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