

Symbol	Typ	Titel
B	Sektion	SECTION B — PERFORMING OPERATIONS; TRANSPORTING
B22	Klasse	CASTING; POWDER METALLURGY
B22F	Unterklasse	WORKING METALLIC POWDER; MANUFACTURE OF ARTICLES FROM METALLIC POWDER; MAKING METALLIC POWDER (processes or devices for granulating materials in general B01J 2/00; making ceramics by compacting or sintering C04B, e.g. C04B 35/64; for the production of metals as such, <u>see</u> class C22; reduction or decomposition of metal compounds in general C22B; making alloys by powder metallurgy C22C; electrolytic production of metal powder C25C 5/00)
B22F 1/00	Hauptgruppe	Special treatment of metallic powder, e.g. to facilitate working, to improve properties; Metallic powders <u>per se</u>, e.g. mixtures of particles of different composition (C04, C08 take precedence)
B22F 1/02	1-Punkt Untergruppe	. comprising coating of the powder [2]
B22F 3/00	Hauptgruppe	Manufacture of workpieces or articles from metallic powder characterised by the manner of compacting or sintering; Apparatus specially adapted therefor
B22F 3/02	1-Punkt Untergruppe	. Compacting only
B22F 3/03	2-Punkt Untergruppe	. . Press-moulding apparatus therefor [6]
B22F 3/035	3-Punkt Untergruppe	. . . with one or more of the parts thereof being pivotally mounted [6]
B22F 3/04	2-Punkt Untergruppe	. . by applying fluid pressure
B22F 3/06	2-Punkt Untergruppe	. . by centrifugal forces
B22F 3/08	2-Punkt Untergruppe	. . by explosive forces
B22F 3/087	2-Punkt Untergruppe	. . using high energy impulses, e.g. magnetic field impulses [6]
B22F 3/093	2-Punkt Untergruppe	. . using vibration [6]
B22F 3/10	1-Punkt Untergruppe	. Sintering only
B22F 3/105	2-Punkt Untergruppe	. . by using electric current, laser radiation or plasma (B22F 3/11 takes precedence) [6]
B22F 3/11	2-Punkt Untergruppe	. . Making porous workpieces or articles [6]
B22F 3/115	1-Punkt Untergruppe	. by spraying molten metal, i.e. spray sintering, spray casting [6]
B22F 3/12	1-Punkt Untergruppe	. Both compacting and sintering (by forging B22F 3/17) [6]
B22F 3/14	2-Punkt Untergruppe	. . simultaneously
B22F 3/15	3-Punkt Untergruppe	. . . Hot isostatic pressing [6]
B22F 3/16	2-Punkt Untergruppe	. . in successive or repeated steps
B22F 3/17	1-Punkt Untergruppe	. by forging [6]
B22F 3/18	1-Punkt Untergruppe	. by using pressure rollers [6]
B22F 3/20	1-Punkt Untergruppe	. by extruding
B22F 3/22	1-Punkt Untergruppe	. for producing castings from a slip
B22F 3/23	1-Punkt Untergruppe	. involving a self-propagating high-temperature synthesis or reaction sintering step [6]
B22F 3/24	1-Punkt Untergruppe	. After-treatment of workpieces or articles

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B22F 3/26	2-Punkt Untergruppe	. . Impregnating
B22F 5/00	Hauptgruppe	Manufacture of workpieces or articles from metallic powder characterised by the special shape of the product
B22F 5/02	1-Punkt Untergruppe	. of piston rings
B22F 5/04	1-Punkt Untergruppe	. of turbine blades
B22F 5/06	1-Punkt Untergruppe	. of threaded articles, e.g. nuts
B22F 5/08	1-Punkt Untergruppe	. of toothed articles, e.g. gear wheels; of cam discs
B22F 5/10	1-Punkt Untergruppe	. of articles with cavities or holes, not otherwise provided for in the preceding subgroups [6]
B22F 5/12	1-Punkt Untergruppe	. of tubes or wires [6]
B22F 7/00	Hauptgruppe	Manufacture of composite layers, workpieces, or articles, comprising metallic powder, by sintering the powder, with or without compacting
B22F 7/02	1-Punkt Untergruppe	. of composite layers
B22F 7/04	2-Punkt Untergruppe	. . with one or more layers not made from powder, e.g. made from solid metal
B22F 7/06	1-Punkt Untergruppe	. of composite workpieces or articles from parts, e.g. to form tipped tools
B22F 7/08	2-Punkt Untergruppe	. . with one or more parts not made from powder
B22F 8/00	Hauptgruppe	Manufacture of articles from scrap or waste metal particles [6]
B22F 9/00	Hauptgruppe	Making metallic powder or suspensions thereof
B22F 9/02	1-Punkt Untergruppe	. using physical processes [3]
B22F 9/04	2-Punkt Untergruppe	. . starting from solid material, e.g. by crushing, grinding or milling (crushing, grinding or milling, in general, <u>see</u> the relevant subclasses, e.g. B02C) [3]
B22F 9/06	2-Punkt Untergruppe	. . starting from liquid material [3]
B22F 9/08	3-Punkt Untergruppe	. . . by casting, e.g. through sieves or in water, by atomising or spraying (using electric discharge B22F 9/14) [3]
B22F 9/10	4-Punkt Untergruppe	 using centrifugal force [3]
B22F 9/12	2-Punkt Untergruppe	. . starting from gaseous material [3]
B22F 9/14	2-Punkt Untergruppe	. . using electric discharge [3]
B22F 9/16	1-Punkt Untergruppe	. using chemical processes [3]
B22F 9/18	2-Punkt Untergruppe	. . with reduction of metal compounds [3]
B22F 9/20	3-Punkt Untergruppe	. . . starting from solid metal compounds [3]
B22F 9/22	4-Punkt Untergruppe	 using gaseous reductors [3]
B22F 9/24	3-Punkt Untergruppe	. . . starting from liquid metal compounds, e.g. solutions [3]
B22F 9/26	4-Punkt Untergruppe	 using gaseous reductors [3]
B22F 9/28	3-Punkt Untergruppe	. . . starting from gaseous metal compounds [3]
B22F 9/30	2-Punkt Untergruppe	. . with decomposition of metal compounds, e.g. by pyrolysis [3]