

Title (en)

THICK FILMS OF YBA SB 2 /SB CU SB 3 /SB O SB 7-Y /SB AND PREPARATION METHOD THEREOF

Title (de)

DICKE FILME AUS YBA SB 2 /SB CU SB 3 /SB O SB 7-Y /SB UND HERSTELLUNGSVERFAHREN DAFÜR

Title (fr)

COUCHES EPAISSES DE YBA₂CU₃O₇-Y, PROCEDE POUR LEUR PREPARATION.

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Application

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Priority

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Abstract (en)

[origin: WO03091475A1] The invention relates to a method of preparing thick films of YBa₂Cu₃O_{7-y} (y = 0.08) having a critical current density of the order of 10<6> A/cm<2>. The inventive method consists in using an inert carrier gas to send an aerosol, obtained from an aqueous solution of precursors of yttrium nitrate, barium nitrate and copper nitrate (0.11=FY=0.28, 0.46=FBa=0.58, 0.2=FCu=0.37,) having a concentration which is essentially equal to the concentration at saturation, to the surface of a heated substrate whereon it undergoes pyrolysis for between 1 and 5 mn at 800 DEG C and 870 DEG C, followed by oxygen annealing at a temperature which is greater than the pyrolysis temperature by at least 10 DEG C and between 850 DEG C and 880 DEG C for between 1 and 2 hours, and subsequently at 450 DEG C - 550 DEG C for between 0.5 and 1.5 hours.

IPC 1-7

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IPC 8 full level

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