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(54) **Sintered materials for valve guides and production methods therefor**

(57) A sintered material for valve guides consists of, by mass %, 1.3 to 3 % of C, 1 to 4 % of Cu, and the balance of Fe and inevitable impurities. The sintered material exhibits a metallic structure made of pores and a matrix, the matrix is a mixed structure of a pearlite phase,

a ferrite phase, an iron carbide phase, and a copper phase, and a part of the pores includes graphite that is dispersed therein. The iron carbide phase is dispersed at 3 to 25 % by area ratio and the copper phase is dispersed at 0.5 to 3.5 % by area ratio with respect to a cross section of the metallic structure, respectively.

Fig. 1A



20 μm



EUROPEAN SEARCH REPORT

Application Number
EP 11 00 7891

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
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Place of search		Date of completion of the search	Examiner
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CATEGORY OF CITED DOCUMENTS X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document			

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**ANNEX TO THE EUROPEAN SEARCH REPORT
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This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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