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(54) Title: COMPOSITE ABRASIVE PARTICLES AND METHOD OF MANUFACTURE

(57) Abstract: The present application discloses an agglomerate. The agglomerate comprises a crystalline matrix. The agglomerate may additionally comprise abrasive particles. The agglomerate has a normalized bulk density of less than about 0.38. The present application additionally discloses a method of manufacturing the agglomerate. The agglomerate is manufactured by forming a mixture comprising an abrasive particle with a sol, the sol comprising an oxide and water and introducing the mixture into a spray dryer. The mixture is then dried in the spray dryer. The mixture is then fired, for example in an oven. The resulting agglomerates comprise abrasive particles retained within a crystalline matrix of the oxide. The present invention additionally discloses methods of using the agglomerates of the present invention.

INTERNATIONAL SEARCH REPORT

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A. CLASSIFICATION OF SUBJECT MATTER		
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According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols) IPC 7 B01J C09K B24D		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, PAJ, WPI Data		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
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A	DATABASE WPI Section Ch, Week 198720 Derwent Publications Ltd., London, GB; Class A60, AN 1987-140294 XP002197659 -& JP 62 079841 A (TEIKOKU KAKO CO LTD), 13 April 1987 (1987-04-13) abstract --- -/--	
<input checked="" type="checkbox"/> Further documents are listed in the continuation of box C. <input checked="" type="checkbox"/> Patent family members are listed in annex.		
° Special categories of cited documents :		
A document defining the general state of the art which is not considered to be of particular relevance *E* earlier document but published on or after the international filing date *L* document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) *O* document referring to an oral disclosure, use, exhibition or other means *P* document published prior to the international filing date but later than the priority date claimed		*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention *X* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone *Y* document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art. *&* document member of the same patent family
Date of the actual completion of the international search 26 April 2002		Date of mailing of the international search report 13/05/2002
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016		Authorized officer Do Huu Duc, J

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C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

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