

Title (en)
ABRASIVE ARTICLES

Publication
EP 0057392 A3 19850109 (EN)

Application
EP 82100448 A 19820122

Priority
US 23046981 A 19810202

Abstract (en)
[origin: EP0057392A2] An abrasive article comprising abrasive grains, a porous support material and a resin bond including a coupling agent for coating said abrasive grains and said support material, said resin bond being adhered to the grains and support material with the aid of said coupling agent, the coupling agent being compatible with the resin bond, said resin bond yielding little or no volatiles during its curing so as to effect the bonding and being cured under conditions to limit production of volatiles so as to maintain the amount of interchannel porosity to less than 14% of the total volume of the abrasive article, the porosity of the article being essentially determined by said support material, whereby the article has dimensional stability during cure and superior resistance to impregnation with water after being cured. The support material may include hollow bodies, such as microbubbles of glass or alumina or the like, and the support material is used in an amount that is carefully controlled to produce the desired porosity in the abrasive article. A wide range of controlled porosity levels in the respective grinding wheels produced may be accomplished resulting in the production of wheels having superior wet strength and dimensional stability.

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IPC 8 full level
B24D 3/00 (2006.01); **B24D 3/28** (2006.01); **B24D 3/32** (2006.01); **B24D 3/34** (2006.01); **B24D 18/00** (2006.01)

CPC (source: EP)
B24D 3/32 (2013.01); **B24D 3/344** (2013.01); **B24D 18/00** (2013.01)

Citation (search report)
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• [A] GB 1474569 A 19770525 - UNIVERSAL GRINDING WHEEL CO LT
• [A] US 3098730 A 19630723 - ROWSE ROBERT A
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• [AD] US 3041156 A 19620626 - ROWSE ROBERT A, et al
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