

18/12/03
2003076965

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
6 November 2003 (06.11.2003)

PCT

(10) International Publication Number
WO 03/091180 A1

(51) International Patent Classification: **C04B 24/26**,
24/12, 24/28, 24/32, C08F 290/06 // C04B 103:32

(21) International Application Number: PCT/JP03/05141

(22) International Filing Date: 23 April 2003 (23.04.2003)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2002-124579	25 April 2002 (25.04.2002)	JP
2002-124580	25 April 2002 (25.04.2002)	JP
2002-144937	20 May 2002 (20.05.2002)	JP
2003-049887	26 February 2003 (26.02.2003)	JP

(71) Applicant (for all designated States except US): **NIPPON SHOKUBAI CO., LTD.** [JP/JP]; 1-1, Koraihashi 4-chome, Chuo-ku, Osaka-shi, Osaka 541-0043 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **YUASA, Tsutomu** [JP/JP]; 1-16-803, Hoshin 5-chome, Higashiyodogawa-ku, Osaka-shi, Osaka 533-0014 (JP). **TANAKA, Hiromichi** [JP/JP]; D-302, 32-50, Shishigaya 1-chome, Tsurumi-ku, Yokohama-shi, Kanagawa 230-0073 (JP). **SAKAMOTO, Noboru** [JP/JP]; 5-1-106, Nishimachi, Takatsuki-shi,

Osaka 569-0854 (JP). **NISHIKAWA, Tomotaka** [JP/JP]; 5-1-202, Nishimachi, Takatsuki-shi, Osaka 569-0854 (JP). **IZUKASHI, Hiroko** [JP/JP]; 5-14-203, Zuiko 2-chome, Higashiyodogawa-ku, Osaka-shi, Osaka 533-0005 (JP). **UNO, Toru** [JP/JP]; A-102, 40-11, Shishigaya 1-chome, Tsurumi-ku, Yokohama-shi, Kanagawa 230-0073 (JP). **HIRATA, Tsuyoshi** [JP/JP]; 4-3-619, Manabigaoka 3-chome, Tarumi-ku, Kobe-shi, Hyogo 655-0004 (JP). **UETA, Tomiyasu** [JP/JP]; 4-52, Nakanoshimacho, Suita-shi, Osaka 564-0035 (JP). **ONDA, Yoshiyuki** [JP/JP]; 61-11, Ikebukuro 2-chome, Toshima-ku, Tokyo 171-0014 (JP).

(74) Agents: **YASUTOMI, Yasuo** et al.; Chuo BLDG., 4-20, Nishinakajima 5-chome, Yodogawa-ku, Osaka-shi, Osaka 532-0011 (JP).

(81) Designated States (national): CN, KR, SG, US.

(84) Designated States (regional): European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

Published:

— with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.



162162



ACTION

WO 03/091180 A1

(54) Title: CEMENT ADMIXTURE AND PRODUCTION METHOD THEREOF

(57) Abstract: The present invention is a cement admixture represented (i) or (ii). (i) comprising a polycarboxylic acid and one (a), (b) or (c) (ii) comprising a polycarboxylic acid polymer resulting from copolymerization using one of (a), (b) or (c) Each of (a), (b) and (c) means (a) a nitrogen atom-containing compound having non-amide bond (b) a polyhydric alcohol-alkylene oxide adduct (c) a polyamidepolyamine.