



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

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| (51) International Patent Classification <sup>7</sup> :<br><b>B01J 20/24, C02F 1/28</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>A1</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | (11) International Publication Number: <b>WO 00/50167</b><br>(43) International Publication Date: 31 August 2000 (31.08.00) |
| <p>(21) International Application Number: PCT/IN00/00015</p> <p>(22) International Filing Date: 24 February 2000 (24.02.00)</p> <p>(30) Priority Data:<br/> 222/MAS/99 24 February 1999 (24.02.99) IN<br/> 223/MAS/99 24 February 1999 (24.02.99) IN</p> <p>(71)(72) Applicant and Inventor: PRASAD, Yandapalli, Durga [IN/IN]; First Road, Bhaskarapuram-21-339-5, Machilipatnam, Krishna District, 521 001 Andhra Pradesh (IN).</p> <p>(74) Agent: GABRIEL, Devadoss, Calab; Kumaran &amp; Sagar, 84-C, C-6 Lane, (Off Central Avenue), Sainik Farms, New Delhi 110 062 (IN).</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | <p>(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).</p> <p><b>Published</b><br/> <i>With international search report.<br/> Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i></p> <div data-bbox="1098 904 1337 972" style="text-align: center;"> </div> <p style="text-align: center;">*G00001*</p> |                                                                                                                             |
| <p>(54) Title: A NOVEL AGROPOLYMER USED FOR PURIFICATION OF POLLUTED WATER OR CONTAMINATED WATER CONTAINING METAL OR IONS AND A METHOD OF PRODUCING THE AGROPOLYMER</p> <p>(57) Abstract</p> <p>The invention relates to a novel agropolymer comprising carbohydrate and/or silica matrix substantially devoid of at least proteins, tannins and polyphenols and having metal binding reactive sites, a method of producing said novel agropolymers from plant material such as seed coats, husks or hulls of the various agricultural crops (<i>Oryza sativa</i>, <i>Panicum miliaceum</i>, <i>Setaria italica</i>, <i>Cajanus cajan</i>, <i>Vigna mungo</i>, <i>Vigna radiata</i>, <i>Triticum sp.</i>, <i>Ricinus communis</i>, <i>Helianthus annuus</i>, <i>Gossypium sp.</i>, <i>Arachis sp.</i>), and a method of purifying of metal and ion polluted/contaminated aqueous solutions including metal or ion polluted drinking water or ground water using the said agropolymer.</p> <div data-bbox="1114 1868 1353 1935" style="text-align: center;"> </div> <p style="text-align: center;">*162162*</p> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                             |