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(21) International Application Number: PCT/CA99/00559 (22) International Filing Date: 2 June 1999 (02.06.99) (30) Priority Data: 09/088,947 2 June 1998 (02.06.98) US (71) Applicant (for all designated States except US): LIGHTYEAR TECHNOLOGIES (USA), INC. [US/US]; Unit 431, 1225 East Sunset Drive, Bellingham, WA 98226-3529 (US). (72) Inventor; and (75) Inventor/Applicant (for US only): RENDINA, David, Deck [CA/CA]; 1063 Heritage Boulevard, North Vancouver, British Columbia V7J 3G7 (CA). (74) Agent: EDWARDS, Anthony; Bishop & Company, 206-347 Leon Avenue, Kelowna, British Columbia V1Y 8C7 (CA).		(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i>
(54) Title: INCLUSION METHODS FOR PURIFYING A SOLVENT (57) Abstract Disclosed are methods for purifying solvents, by causing contaminants to be included within layers of dispersed exfoliated layered materials (transition metal dichalcogenides like tungsten disulphide), and then separating the restacked combined contaminant/layered material from the solvent. The methods may be utilized to remove materials suspended in the solvents, materials immiscible with the solvents, and are especially useful for separating soluble materials from the solvents within which they are dissolved. The application of these methods will be beneficial in the remediation of polluted soil and water, the desalination of water, waste oil and gray water purification, the preparation of pharmaceuticals, and many other areas.		