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(21) International Application Number: PCT/US99/12658 (22) International Filing Date: 4 June 1999 (04.06.99) (30) Priority Data: 60/088,055 5 June 1998 (05.06.98) US (71)(72) Applicant and Inventor: BETENSKY, Ellis, I. [US/CA]; 61 St. Clair Avenue West #1008, Toronto, Ontario M4V 2Y8 (CA). (74) Agent: KLEE, Maurice, M.; 1951 Burr Street, Fairfield, CT 06430 (US).	(81) Designated States: AL, AU, BA, BB, BG, BR, CA, CN, CU, CZ, EE, GD, GE, HR, HU, ID, IL, IN, IS, JP, KP, KR, LC, LK, LR, LT, LV, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, SL, TR, TT, UA, US, UZ, VN, YU, 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 With international search report.	
(54) Title: INVERSE TRIPLET LENS ASSEMBLIES (57) Abstract Objective lenses employing three lens units (U1, U2, U3) having a negative (or weak positive), positive, negative configuration are disclosed. The lenses have a total field coverage of at least 50 degrees with a relative aperture of less than f/5. They employ small lens elements having aspherical surfaces and are designed for mass production, particularly using plastic optical materials. The designs do not exist in an all spherical form because the aberrations, particularly distortion, cannot be sufficiently corrected, but by using a sufficient number of aspherical surfaces, not only can the aberrations be corrected to a higher degree than a conventional aspherized triplet design, but the sensitivity to manufacturing deviations can be minimized. Optionally, the lenses can include a fourth lens unit (U4) which provides an extended exit pupil which is desirable when the lens is used with a digital light sensor.		