



INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification ⁷ : F16B 2/20, G02B 7/02	A1	(11) International Publication Number: WO 00/68580 (43) International Publication Date: 16 November 2000 (16.11.00)
(21) International Application Number: PCT/US00/10947 (22) International Filing Date: 24 April 2000 (24.04.00) (30) Priority Data: 09/305,938 6 May 1999 (06.05.99) US (71) Applicant: U.S. PRECISION LENS [US/US]; 3997 McMann Road, Cincinnati, OH 45245 (US). (72) Inventors: OKOROCHA, Livyn, O.; 8064 Debonair Court, Cincinnati, OH 45237 (US). PURVIS, Wilton, R.; 4826 Summerside Road, Cincinnati, OH 45244 (US). (74) Agent: MURPHY, Silvy, A.; Patent Department, SP TI 3-1, Corning Incorporated, Corning, NY 14831 (US).		(81) Designated States: CN, JP, KP, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published With international search report.
(54) Title: LOCKING DEVICE FOR PROJECTION TELEVISION LENS ASSEMBLY		
(57) Abstract		
A locking device is provided for locking two matching lens cell halves (12, 14) of a lens cell (10). In particular, the invention resides in clips which are located at the joint where the two cell halves mate. The clips, which are molded as part of each cell half, are each comprised of a male member (16) which is inserted into a female member (22). The male member (16) includes a flexible tab (20) which is deflected when inserted into the female member (22). After insertion, it is maintained in a deformed state, that is the tab (20) is maintained by the female member so that it is bent from its original position. As a result, a bending moment is induced and maintained in the tab and that moment pushes the tab against an outer wall of the female member. Consequently, forces are established which lock the male member in place. Additionally, the wall of the female member (22) exerts a force on the tab and that force, which is inwardly directed, serves to lock together the two halves and ensures retention of the lens units within the lens cell (10).		