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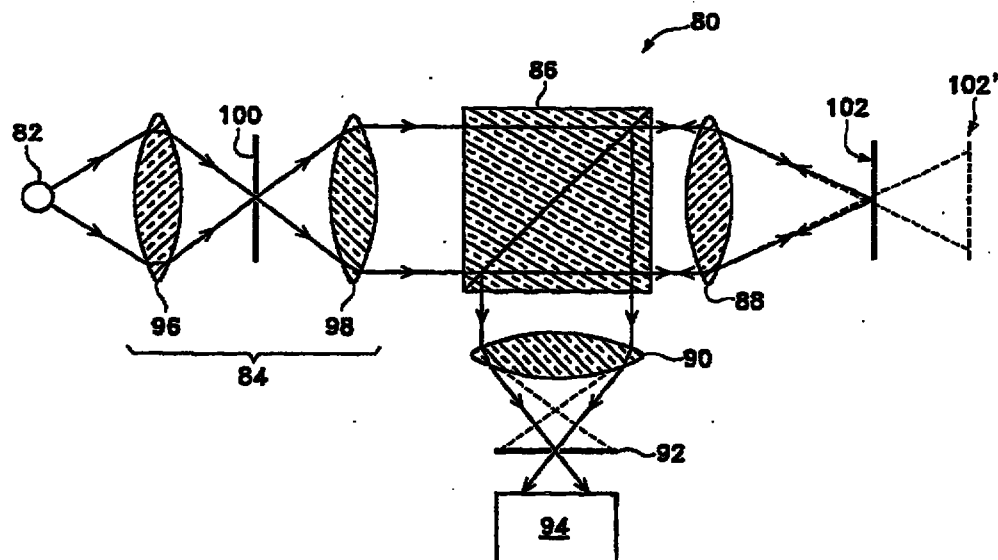
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(21) International Application Number: PCT/US96/07631 (22) International Filing Date: 23 May 1996 (23.05.96) (30) Priority Data: 08/476,462 7 June 1995 (07.06.95) US (71) Applicant: KERAVISION, INC. [US/US]; 48630 Milmont Drive, Fremont, CA 94538-7353 (US). (72) Inventors: SCHOLL, John, Anthony; 14 Woodranch Circle, Danville, CA 94506 (US). SILVESTRI, Thomas, A.; 1701 Las Trampas Road, Alamo, CA 94507 (US). GANDIONCO, Isidro, Matias; 36520 Alder Court, Fremont, CA 94536 (US). KUHN, William, C.; 2810 W. Daffodil Place, Tucson, AZ 85745 (US). BAKER, Phillip, C.; 32 Camino Del Diablo, Orinda, CA 94563 (US). (74) Agents: SALTZBERG, Robert, A. et al.; Morrison & Foerster L.L.P., 755 Page Mill Road, Palo Alto, CA 94304-1018 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i>

(54) Title: METHOD AND APPARATUS FOR MEASURING CORNEAL INCISIONS



(57) Abstract

A method and apparatus for performing a surgical procedure on a patient is described. An incision (20) is made into the tissue of the patient to create a tissue pocket (30). Preferably, the tissue is corneal tissue of an eye. A reflective element (50) is inserted into the pocket (30). An energy source (82) generates a radiant energy signal, which is directed toward the reflective element (50). Reflected energy is received from the reflective element. A detector (94) determines the depth of the reflective element (50) below the anterior surface based upon the energy reflected by the reflective element (50). The speed of transmission of the radiant energy in the reflective element is different than the speed of transmission of the radiant energy in the tissue. The radiant energy may take the form of ultrasound or light.