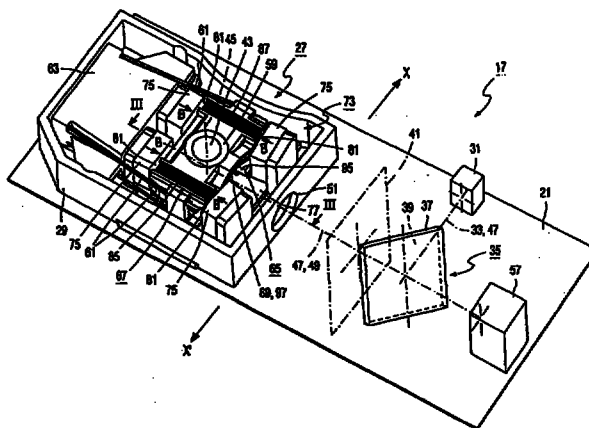




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(21) International Application Number: PCT/EP00/03792 (22) International Filing Date: 25 April 2000 (25.04.00) (30) Priority Data: 99201441.5 7 May 1999 (07.05.99) EP (71) Applicant: KONINKLIJKE PHILIPS ELECTRONICS N.V. [NL/NL]; Groenewoudseweg 1, NL-5621 BA Eindhoven (NL). (72) Inventors: STINESEN, Bernardus, J.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). HAUS, Thomas, A., J.; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). VAN EIJNDHOVEN, Pierre; Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL). (74) Agent: WOLFS, Marc, J., M.; Internationaal Octrooibureau B.V., Prof. Holstlaan 6, NL-5656 AA Eindhoven (NL).		(81) Designated States: CN, JP, KR, SG, European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i>

(54) Title: OPTICAL SCANNING DEVICE COMPRISING A BENT ACTUATOR COIL



(57) Abstract

The invention relates to an optical scanning device (17) for scanning an information track which is present on an information carrier (9). The scanning device comprises a radiation source (31), a lens system (43) with an optical axis (45) for focusing a radiation beam (47) supplied by the radiation source into a scanning spot (55) on the information carrier, and a focusing actuator (65) for displacing the lens system relatively to a basic part (29) of the scanning device in a direction parallel to the optical axis. The actuator comprises an electric coil (69) which is arranged around the lens system and provided with a passage (95) for a radiation beam path (49) which extends in a direction perpendicular to the optical axis. According to the invention, the electric coil is provided around the lens system by means of a winding process, the passage being provided in the coil by bending the parts (97) of the coil wires which are present near the radiation beam path, in a direction substantially parallel to the optical axis. In a preferred embodiment, said parts of the coil wires are bent during the winding process by means of a mandrel which is present in the passage during the winding process. In this manner, the optical scanning device according to the invention can be manufactured in a simple manner by means of a reduced number of process steps. The optical scanning device according to the invention can be used in an optical disc player according to the invention.