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(71) Applicant: GEMOLOGICAL INSTITUTE OF AMERICA, INC. [US/US]; 5345 Armada Drive, Mail Stop #20, Carlsbad, CA 92008 (US).

(72) Inventors: DE JONG, Peter; Waalhofstraat 15, B-2100 Deurne (BE). GEURTS, Ronald; Beekhoekstraat 71, B-2540 Hove (BE).

(74) Agent: SOKOL, Brent, D.; Lyon & Lyon LLP, Suite 4700, 633 West Fifth Street, Los Angeles, CA 90071-2066 (US).

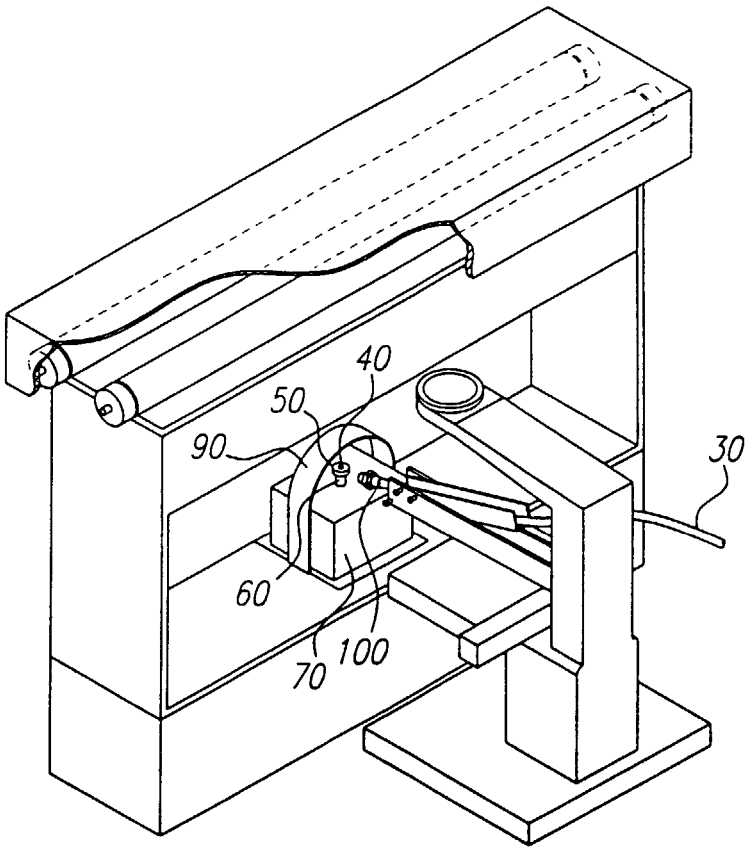
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(54) Title: SYSTEMS, APPARATUSES AND METHODS FOR DIAMOND COLOR MEASUREMENT AND ANALYSIS



(57) Abstract: The present invention comprises systems, apparatuses and methods for measuring and analyzing gem color in a way which reliably and consistently simulates visual color analysis methodology. The preferred system embodiment of the present invention comprises several aspects, including the use of daylight approximating lamps (10), such as daylight approximating fluorescent tubes or halogen lamp boosted with a filter to approximate daylight, and a light detector which light of a specific angle such that the system approximates visual analysis methodology. In the case of diamond analysis, in one embodiment, the system of the invention includes three major elements: a daylight approximating light source (10) that illuminates the pavilion side of the diamond (40), a light detector (30) which detects light coming out at a specific angle from the pavilion side of the diamond (40), and an optical measurement device which measures the light detected by the light detector (30).

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