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(54) Title: METHOD AND APPARATUS FOR DETECTING GLASS PARTICLES IN GLASS BOTTLES FILLED WITH BEER

(57) Abstract

This invention provides method and apparatus (100) for detecting small glass particles (12) in bottles (1) filled with beer (10). The beer (10) is caused to rotate with respect to the bottle (1), and successive images are obtained from the bottle by means of a CCD-camera (40) which is arranged such that its optical axis (41) makes an angle α of about 135° with the axis (13) of the bottle (1), which is illuminated from below. The successive images are subtracted from each other to detect refracted light emanating from glass particles. These measurements are repeated a plurality of times. The invention thus offers an improvement in sensitivity and reliability of a detecting method. An apparatus (100) comprises a carousel (103) with a plurality of cameras dedicated to a single bottle. A system is described to reduce costs by having eight cameras share one image processing unit.

