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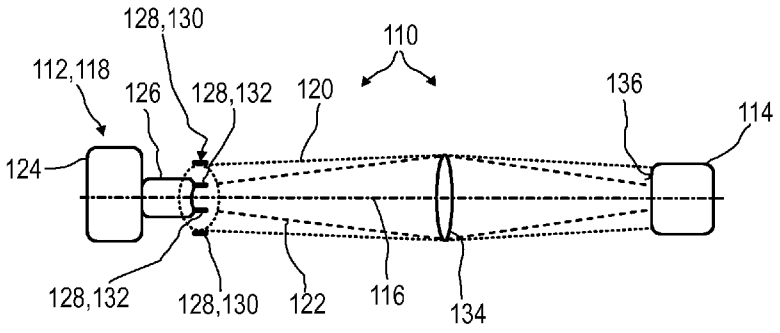
(54) Title: DETECTOR FOR OPTICALLY DETECTING AT LEAST ONE OBJECT

FIG.1



(57) Abstract: A detector (110) for an optical detection of at least one object (112) is disclosed. The detector (110) comprises: at least one illumination source (118) adapted to emit at least one first light beam (120) and at least one second light beam (122), wherein the first light beam (120) has a first opening angle and the second light beam (122) has a second opening angle, wherein the first opening angle is different from the second opening angle; - at least one longitudinal optical sensor (114), wherein the longitudinal optical sensor (114) has at least one sensor region (136), wherein the longitudinal optical sensor (114) is designed to generate at least one longitudinal sensor signal in a manner dependent on an illumination of the sensor region (136) by a light beam, wherein the longitudinal sensor signal, given the same total power of the illumination, is dependent on a beam cross-section of the light beam in the sensor region (136); and at least one evaluation device (164), wherein the evaluation device (164) is adapted to differentiate the longitudinal sensor signal of the longitudinal optical sensor (114) into a first longitudinal sensor signal dependent on the illumination of the sensor region (136) by the first light beam (120) and a second longitudinal sensor signal dependent on the illumination of the sensor region (136) by the second light beam (122), wherein the evaluation device (164) is designed to generate at least one item of information on a longitudinal position of the object (112) by evaluating the first longitudinal sensor signal and the second longitudinal sensor signal.

WO 2017/186850 A8

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