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(54) Title: IMAGE SENSOR BASED AUTONOMOUS LANDING

(57) Abstract: A computer-implemented method of controlling an aircraft during autonomous landing. The method includes using a computer for performing the following: applying image processing on an image captured by a camera on board the aircraft while approaching a runway for identifying in the image a touchdown point (TDP) of the runway; calculating a deviation, in image parameters, of the TDP relative to the center of the image; converting the deviation in image parameters to angular and distance deviation values based on pre-defined ratios; calculating an offset of the aircraft's position relative to a landing corridor ending at the identified TDP based on the calculated angular and distance deviation; and transmitting the calculated offset to an aircraft control system configured to provide instructions for controlling the aircraft; wherein the offset is used for controlling the aircraft for guiding the aircraft towards the landing corridor to enable landing.

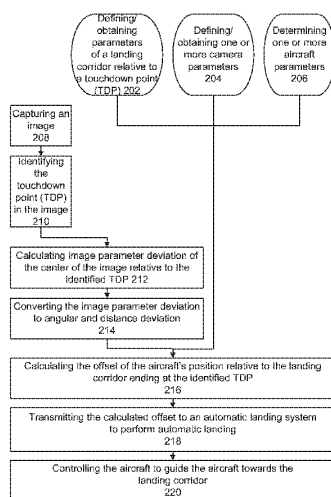


FIG. 2