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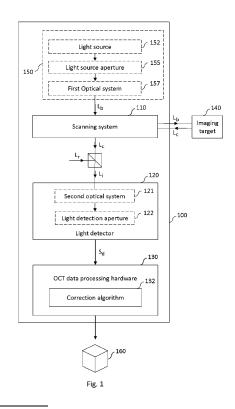
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## (54) NON-CONFOCAL POINT-SCAN FOURIER-DOMAIN OPTICAL COHERENCE TOMOGRAPHY IMAGING SYSTEM

(57)A non-confocal point-scan Fourier-domain optical coherence tomography, OCT, imaging system, comprising: a scanning system arranged to perform a two-dimensional point scan of a light beam across an imaging target, and collect light scattered by the imaging target; a light detector arranged to generate a detection signal based on an interference between a reference light and the light collected by the scanning system. The OCT imaging system further comprises hardware arranged to: generate complex volumetric OCT data of the imaging target based on the detection signal, the OCT data including a component which, when the OCT data is processed to generate an enface projection of the OCT data, provides a defocusing and/or distortion in the enface projection; and generate corrected OCT data by executing a correction algorithm which uses phase information in the OCT data to remove at least some of the component from the OCT data.



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