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(54) COMMON BEAM SCANNING RETINA IMAGING SYSTEM

(57) A common beam scanning retinal imaging system comprises: a light source module (1), an adaptive optics module (2), a beam scanning module (3), a small field-of-view relay module (5), a large field-of-view relay module (6), a sight beacon module (9), a pupil monitoring module (7), a detection module (8), a control module (10) and an output module (11). The system can perform real-time correction of human eye aberration by adaptive optics technology, and realize the confocal scanning imaging function in a large field of view and the adaptive optics high-resolution imaging function in a small field of view simultaneously by the common beam synchronous scanning configuration combined with the two relay optical path structures for both the small field of view and the large field of view. The system can not only observe disease lesions in a wide range on the retina by the large field-of-view imaging, but also observe fine structures of the lesions by the small field-of-view high-resolution imaging. A variety of imaging images are acquired by common path optical beam scanning to meet the needs of different application scenes, which greatly expands the application range of the existing confocal imaging equipment.

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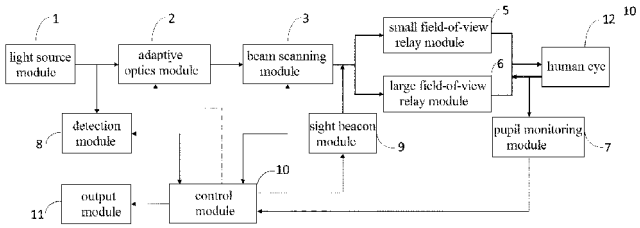
1
2
3
5
10
12
light source module
adaptive optics module
beam scanning module
small field-of-view relay module
large field-of-view relay module
human eye
6
detection module
8
sight beacon module
9
pupil monitoring module
7
10
output module
11
control module

Figure 1