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#### (54) SYSTEMS AND METHODS FOR STABILIZING VIDEOS USING OPTICAL FLOW DERIVED MOTION AND MOTION SOLVE DERIVED MOTION

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(57)**ABSTRACT** 

An image capture device may capture a video while experiencing motion. Motion of the image capture device during video capture may be determined based on optical flow and structure from motion solve of the video. Optical flow derived motion and/or the motion solve derived motion of the image capture device may be selected to perform stabilization of the video.



201

Obtain visual information, the visual information defining visual content captured by an image capture device during a capture duration, the visual content defined within video frames.

202

Determine optical-flow-derived motion of the image capture device during the capture duration based on optical flow within the video frames.

203

Determine motion-solve-derived motion of the image capture device during the capture duration based on a structure from motion solve of the video frames.

204

Select among the optical-flow-derived motion of the image capture device and the motion-solve-derived motion of the image capture device for stabilization of the visual content.

205

Stabilized the visual content based on the selected motion of the image capture device.