# SPHERICAL OMNIDIRECTIONAL VIDEO-SHOOTING SYSTEM


## ABSTRACT

A system is described for 360° spherical and stereoscopic video recordings, also adapted to view and send realtime data wirelessly to other devices, the system comprising: a structure **(3, 5, 6)** supporting an electronic board (16) where a microprocessor **(1)** and other electronic components are houses; at least two electronic high-definition wide-angle cameras (2), with an upper angle of 100 °, inserted in the structure (3) and arranged radially from the center of the apparatus designed to create spherical photos and videos, wherein the system is suitable for recording at the same time also in stereoscopic mode, producing already merged images, stitching in real time signals from different optics, and realtime transferring them to remote devices through a wireless module present therein, eliminating the distortion of images. The system which is adapted to operate in air or liquid, on the ground or driven by a motor and a propulsion system, to be used in areas affected by natural disasters, earthquakes, seismic events, or volcanic events. The system have a laser rangefinder capable of detecting the distance and shape, through its laser beams (**24, 25)** in flight and on the ground, under water, as explained in Figure 20,21, acquisition and rata recorded in electronic format, is explained in Figure 22.