

KINEMATIC PLATFORM



Abstract: The Kinematic Platform is a Tripod providing six degrees of freedom with controlled braking at each joint and provides high dexterity within the workspace.

Invention

The invention is a Tripod that can be used to support devices such as Cameras. The proposed tripod has six degrees of freedom with the ability to move forward/backward, up/down, left/right, combined with rotation about three perpendicular axes, termed as pitch, yaw, and roll.

The tripod also has controlled braking at each joint and provides high dexterity within the workspace, which means, the device provides ability to perform a difficult action within a space quickly and skilfully.

Applications

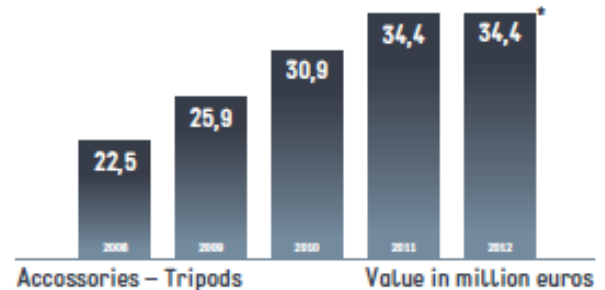
The primary application of proposed Tripod is to support cameras. Additionally, it can also be used as support for mobile phones and medical devices in hospitals.

Advantages

1. Six degrees of freedom
2. Controlled braking at each joint
3. High dexterity within the workspace (which means, the device provides ability to perform a difficult action within a space quickly and skilfully)

Market Size and Growth

Irrespective of improved image stabilizers in cameras and lenses, and sensors with higher sensitivity, tripods have not lost in importance. In 2011, around 800,000 tripods (plus 12.5 percent against 2010) worth 34.4 million euros (plus 11 percent against 2010) were sold in Germany.



Source: Trends In The Photo And Imaging Market, Photokina, 2012

Looking for Industrial Partner for Technology Development

KFUPM likes to seek market feedback from industry, license the technology to an industrial company to commercialize it and/or partner with an industrial company for further development of this technology.

Intellectual Property (IP) Protection

The invention is protected through US patent 8,956,068 that was granted on Feb 17, 2015 and covers the product and its features. The IP is owned by King Fahd University of Petroleum & Minerals.

About KFUPM

King Fahd University of Petroleum & Minerals is a leading educational organization for science and technology. The Innovation & Industrial Relations (IIR) office at KFUPM is tasked with taking innovation from lab to market place. For any inquiries regarding this technology, please get in touch with IIR using the contact details below.

Contact

Mr. Mohammed Najid,
Coordinator, IP Unit, IIR
Project ref. no.: ME 228
Telephone: +966-1-3860 3198
Email: manajid@kfupm.edu.sa
Website: <http://ttie.kfupm.edu.sa>

