



# STEREOSCOPIC IMAGE ACQUISITION DEVICE

*Innovative optical concept for generating 3D images with a single instrument*

## Technological benefits

### Stereoscopic vision

Two different angles of incidence enable stereoscopic image acquisition using a single instrument

### A simple and innovative concept

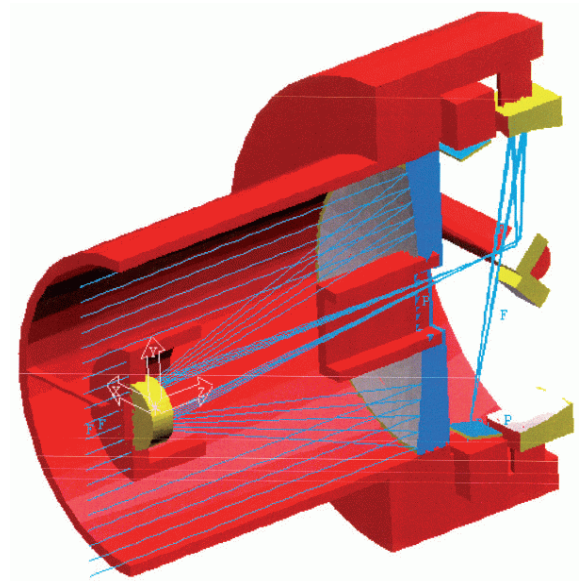
Simple optical design

Compact mechanical setup

Optimised use of "flux collector," which is the largest, most massive and most costly part of the telescope

### Enhanced reliability

With effort limited to doubling of rear cavity (tertiary mirror), two optical instruments are available



Opto-mechanical design of a "double Korsch" telescope

## Invention overview

Based on a classic three-mirror "Korsch" telescope concept, the optical design of the rear cavity is doubled.

Two tertiary mirrors are used to create two separate images. These two images enable the generation of 3D images for scroll systems using a single optical instrument.

## Potential applications

### 3D imaging for scroll systems:

- Onboard systems
- Satellites

### Two image-plane imaging for all ground or on-board optical applications

**TRL : 8 (2010)**

*Patented invention, available under license*

## Commercial benefits

### Optimised design

Cost savings for two imagers

A single instrument is sufficient to generate 3D images

Presence of a second image channel