ABSTRACT

A device (800) for protecting an aircraft against missiles, includes a Short-Wave InfraRed based (SWIR-based) Missile Tracking Unit, having a SWIR-based optical imager that associated with an optical SWIR band filter. The device (800) further includes a SWIR signals processor; it analyzes the captured SWIR optical signals; and it performs a SWIR-based missile acquisition process, which is also based on raw angular position data of a missile as received from a Missile Approach Warning System (MAWS); and it performs a SWIR-based missile tracking process, which continuously and dynamically determines a precise angular position of the missile based on the captured SWIR optical signals. The device (800) includes a laser-based missile-jamming unit, having an internal laser emitter; and optionally also being operably associated with an external high-power laser emitter; to disrupt the missile, or to disrupt a guiding station of the missile.

Fig. 6