

Solar concentrator**N° de brevet:** JP2004504232 (T)**Date de pub:** 2004-02-12**Inventeur(s):****Demandeur(s):****Classification:**

- internationale: **B64G1/44; F24J2/16; H01L31/042; H01L31/045; H01L31/052; B64G1/22; B64G1/42; F24J2/06; H01L31/042; H01L31/045; H01L31/052; B64G1/22; (IPC1-7): B64G1/44; H01L31/042; H01L31/052**

- européenne: **B64G1/44A; F24J2/16; H01L31/045; H01L31/052B**

N° de demande: JP20020513767T 20010706**N°(s) de priorité:** EP20000202669 20000720; WO2001EP07839 20010706**Également publié en tant que:**

EP1174342 (A1)
 US2002007845 (A1)
 US6528716 (B2)
 UA75363 (C2)
 RU2285979 (C2)

[plus >>](#)

Abrégé non disponible pour JP 2004504232 (T)

Abrégé du document correspondant: **EP 1174342 (A1)**

A space solar concentrator based on light-weight reflectors attached to the solar panel is described. The integration of the reflectors allows for a high modularity. Solar panel deployment is not perturbed by the reflectors even with two-dimensional deployment concept. Each reflector consists in small saw tooth aligned as rows with solar cell rows in between. Low concentration is achieved with a high level of thermal control and a high optical efficiency. When small off-pointing occurs, the solar flux distribution is still the same on each cells. It guarantees a good electrical control and management on the whole panel. The reflector is preferably made of a thin film tight on a light-weight rigid frame deployed after launch. In another embodiment, the reflector is part of the panel substrate. The stowed configuration allows for superimposition of the solar panel. High reflectivity of the reflectors results from the use of vacuum deposited aluminum or preferentially over-protected silver.

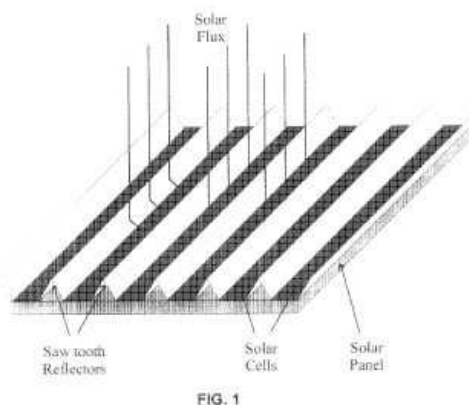


FIG. 1

Données issues de la base de données — Worldwide