

Title (en)
ADVANCED CAVITY RECEIVERS FOR PARABOLIC SOLAR TROUGHS

Title (de)
EMPFÄNGER MIT FORTGESCHRITTENER RESONANZ FÜR PARABOLISCHE SOLARRINNEN

Title (fr)
RÉCEPTEURS À CAVITÉ PERFECTIONNÉS POUR MIROIRS CYLINDRO-PARABOLIQUES

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Application
EP 14870350 A 20141211

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Abstract (en)
[origin: WO2015089273A1] A heat-absorbing element partly enclosed in an insulating layer or jacket, has absorbing surface that is accessible to solar radiation. The thermal insulation is designed to provide entry to solar radiation by way of a cavity. In cross-section, the insulation jacket has approximately the form of a letter "C" or "U" oriented so that the opening of the "C" or "U" faces toward a parabolic collector that focuses light thereon. The absorbing surface can be substantially planar (i.e., flat) rather than another shape (for example, in one embodiment, an arc) which reduces the absorbing surface's area for a given aperture width. This reduces the area that can re-radiate heat energy away from the heat absorbing element. The heat absorbing element is supported so that its distance relative to the parabolic collector does not change as the heat absorbing element expands upon heating and contracts upon cooling.

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