# Abstract

Apparatuses, methods and vehicles for dismantling photovoltaic (PV) modules. The apparatuses comprising: a frame removal station, a PV module dismantling station, a solar cell separation station; and one or more conveyor elements configured to convey the PV modules through the stations. A frame is separated from the PV module by the frame removal station to recover the frame and obtain a frameless PV module. A junction box and a back sheet are separated from the frameless PV module by the PV module dismantling station to obtain a partially disassembled PV module. Encapsulated solar cells are separated from the partially disassembled PV module by the solar cell separation station to recover a glass panel and obtain encapsulated solar cells. The apparatus is mountable on a vehicle for on-site dismantling operations.

**Figure 11**