

Title (en)
RECYCLING OF FLAT PANEL DISPLAYS

Title (de)
RECYCLING VON FLACHBILDSCHIRMEN

Title (fr)
RECYCLAGE D'AFFICHAGES À ÉCRANS PLATS

Publication
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Application
EP 20824079 A 20200916

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Abstract (en)
[origin: WO2021053026A1] The present invention concerns the field of safe disposal or recycling of devices which include backlit LCD flat panel displays (FPDs) such as televisions, public information screens and signs, advertising panels, computer monitors and lap-tops, tablets and computers with integrated flat panel displays (100). The disclosure provides a process for the disassembly of backlit LCD FPDs which each comprise a Liquid Crystal Display screen which occupies a front face of the FPD and a housing (101) which accommodates the LCD screen (103), with backlighting means (300) disposed adjacent a backside of the LCD display screen to provide illumination, the housing including a front border region which serves as a frame around the LCD display screen, wherein the method comprises: (i) providing an end-of-life waste FPD, (ii) conveying the FPD to a cutting station and cutting directly into the exposed LCD display screen along cutting paths which are offset inwardly from the front border regions (102), so as to create a generally rectilinear sub-unit (113) of the LCD display screen within the screen border region, (iii) causing or allowing the screen sub-unit to become detached from the screen border, and setting aside or conveying the screen sub-unit for storage, disposal or further processing, and (iv) conveying the FPD chassis remaining after sub-unit detachment to a treatment station, and removing the backlighting means in the housing rendered accessible by removal of the screen sub-unit.

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