

Title (en)

METHOD AND APPARATUS FOR RECYCLING WASTE CONTAINING PLASTIC AND/OR ORGANIC MATERIAL

Title (de)

VERFAHREN UND VORRICHTUNG ZUR RÜCKGEWINNUNG VON KUNSTSTOFF UND/ODER ORGANISCHES MATERIAL ENTHALTENDEN ABFÄLLEN

Title (fr)

PROCEDE ET APPAREIL DE RECYCLAGE DE DECHETS CONTENANT DES MATIERES PLASTIQUES ET/OU ORGANIQUES

Publication

**EP 0730627 A1 19960911 (EN)**

Application

**EP 94924857 A 19940809**

Priority

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Abstract (en)

[origin: DE4327958C1] By means of the apparatus (10) described, waste of all types, in particular plastic waste, of a single type or mixed, are broken down to their base components and can then be reused, e.g. plastic waste from scrap refrigerators. For this purpose, the waste (12) is impinged by high-intensity microwave energy using magnetrons (28) in a vacuum chamber (16), a previously introduced gas, e.g. argon, being ionised, which has the effect that gaseous constituents leave the waste (12) and form a plasma under the action of the microwave energy, which plasma finally completely breaks down the waste (12). The plasma is ignited by passing hydrogen into the vacuum chamber (16) containing the ionised gas. The waste (12) is reduced by the action of the plasma and hydrogenated by the hydrogen. Gaseous constituents of the waste (12) are removed via outlet lines (24, 26), and a liquid or pulverulent residue in a waste reception vessel (13) is removed together with this from the vacuum chamber (14).  
<IMAGE>

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IPC 8 full level

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