MULTILAYER FILM DELAMINATION PROCESS

TECNOLOGÍA PATENTADA

LICENCIADA

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RESUMEN

The University of Alicante Research group, '**Engineering for Circular Economy (E4CE)**', has developed a procedure for the delamination of the multilayer film.

The most innovative aspect of this technology is the fact that it uses a mechanical method, rather than a chemical dissolution, to facilitate access to the area between layers of the laminates. As the reactant accesses the interlayer, they eliminate the adhesive that joins these films, thus producing the separation of these. This process of separating layers is called **delamination.**

Companies interested in the commercial exploitation of this technology are sough.

VENTAJAS Y ASPECTOS INNOVADORES

This technology has the following advantages:

- It allows the **vast majority** of **multilayer plastics** to be recycled.
- It allows **eliminating** the **printed ink** present in the **interlayer.**
- The technology is **simple** and **easy to implement**.
- **Environmentally friendly** procedure.
- No need to use **organic solvents**.
- It is **not necessary to cut material below 5x5 cm^2**.

INNOVATIVE ASPECTS OF THE TECHNOLOGY

The removal of any ink and adhesives from laminated materials is very complex, as the plastic itself prevents access to the reagent. The principal innovative aspect of this technology is the fact that **micro-perforations are made in the laminated plastic material**, **which allows the access of reagents to the interlaminate area**. In this way, ink and adhesive can be removed at later stages

APLICACIONES DE LA OFERTA

The present invention falls within the general field of **chemical engineering** and **circular economy**.

This procedure could be useful in the packaging and plastic recycling sectors

COLABORACIÓN BUSCADA

Companies interested in acquiring this technology for its **commercial exploitation** through technology transfer agreements (see below) are sought.

- Patent license agreements.
- Technical cooperation agreements (R&D projects) for the use of the technology or application in other waste or sectors.
- Partners for establishing a technology-based company for multi-layer plastic recycling through this technology.

Company profiles sought:

- Recycling of plastic waste.
- Manufacturers of plastic containers.
- Producers of virgin raw material.