

Method for recovering carbon fibres from waste composites treating vapours by pyrolysis

Obtaining of high value chemicals through the treatment of the vapours generated in the recycling process of carbon fibres from waste composites by means of thermal methods.

TYPE OF DEVELOPMENT

Recycling methodology.

DESCRIPTION

A technology for thermal or thermo-catalytic treatment of the gases and vapours that are released from the pyrolysis process of fibre-reinforced plastic waste. It is carried out in line and at the same time as pyrolysis is performed and generates a liquid product and a gaseous product with high added value.

This method can be applied to the vapours generated in the thermal treatment of any type of waste carbon fibre reinforced polymer (CFRP), such as production waste generated by manufacturers or end-of-life CFRP's. In turn, the technology can be applied to any waste composite whose fibres are wanted to be recovered (glass fibres, organic fibres, etc.).

INDICATION

Suitable for companies interested in the integral valorization of fibre-reinforced plastic waste, whether they are waste managers or producers.

NOVELTY/ADVANTAGES

This method allows obtaining (1) liquids that contain raw materials for the re-formulation of plastic resins and (2) gases with high hydrogen content. This, together with the recovery of the fibres, allows the simultaneous generation of 3 products of interest and commercial value.



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COOPERATION GOAL

License agreement