

RECYCLING OF PLASTICS FROM BIODEGRADABLE BAGS

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The end-of-life management of starch-based plastic bags is currently carried out by composting or anaerobic digestion. This invention consists in an alternative valorization strategy of these materials in a circular economy approach.

Protection: Italy, with the possibility to extend internationally

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INVENTION

The invention allows the end-of-life management of starch-based plastics through thermochemical processes as alternatives to composting and anaerobic digestion. This allows to recover and recycle the atoms and functionalities present in starch-based plastics by depolymerization and rearrangement, producing new chemical compounds and materials, in a circular economy perspective.

ADVANTAGES

The main advantage of the invention is the possibility of "recycling" the atoms and functional groups present in the biodegradable starch-based bags, to produce new chemical compounds or plastic materials.

APPLICATIONS

- **Chemical and plastics industry**, thanks to the production of chemical compounds and materials
- **Recycling of starch-based plastics.**

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