

INNOVATIVE PROCESS TO OBTAIN CELLULAR MATERIALS APPLIED TO BUILDINGS WITH NEW FUNCTIONALITIES

P PATENTED TECHNOLOGY



CONTACT DETAILS:

Research Results Transfer Office-
OTRI
University of Alicante
Tel.: +34 96 590 99 59
Email: areaempresas@ua.es
<http://innoua.ua.es>

ABSTRACT

A Spanish researcher has developed a new process to obtain cellular materials that can be applied in different sectors. It can be used with polymers, ceramic, concrete, glass or composites without changing its chemical composition.

It is easy, cheap and doesn't need any specific machinery. The materials obtained have a lot of advantages and very good mechanical and functional properties. Researchers are looking for companies interested in licensing the patent for its commercial exploitation.

TECHNOLOGY ADVANTAGES AND INNOVATIVE ASPECTS

- The resultant porous material doesn't change its original chemical composition but changes its physical structure.
- Very low production cost.
- Lightweight materials are obtained.
- Insulating materials can be obtained.
- Porous can be used to introduce some chemicals in the material to give it certain properties (for example, flameproof).
- The obtained materials can float in water.
- Special machinery is NOT needed to process the materials.
- The cellular material can be produced in situ.
- Easy manufacturing process without dangerous chemicals involved.
- This technology can be applied to a lot of material like polymers, concrete, gel, composites, etc.

Cellular materials are a new and attractive materials class with interesting applications in different sectors.

MARKET APPLICATIONS

With this kind of materials can be satisfied the new requests of the market in new engineering and technological applications like:

BUILDING:

- Cellular materials for building and thermal and acoustic insulations.
- Cellular concrete for buildings with different shapes and sizes and with the original chemical composition of the concrete.

TECHNOLOGY:

- Cellular materials to thin layer processes. Thin layers can be obtained between the cellular structures of the matrix.

COLLABORATION SOUGHT

Companies interested in acquiring this technology for commercial exploitation are sought.
