

Profile Titel        **Decorative coating of panels for interior and exterior**

Reference

Country of Origin Austria

Type of  
Cooperation        Offer

Listing / update    26.04.10

## **Summary**

**An Austrian product-development SME has developed a technology to apply thin layers of sand and other granular material to panels from wood, glass, metal and plastic.**

**The intended use is for decorative coating of larger surfaces in the construction industry and interior design. The panels are used for facades, wall panels, to replace tiles or painted decoration.**

**The colours and smoothness/roughness vary with the selected sand. Artificially coloured materials are as well available as natural sands that give the appearance of stone.**

**The creation of logos, regular or random patterns and shadings is possible with several different process variations.**

**The production process and the materials used are extremely eco-friendly and free from harmful substances. No special precautions for workers safety are needed and the production infrastructure is simple and low-cost.**

## **Details**

The main idea was to create a light-weight and cost-efficient material that can replace expensive and heavy stone, marble and other mineral materials without compromising on the esthetic appeal.

Depending on the carrier material that is coated the material is very light or light and easy to transport, handle and install.

There is no drying phase on the construction site so that the construction project is finished with the fixing of the panels to the wall or the selected sub-construction.

The technology is compatible with ventilated facades and other standard methods for panelling in interior and exterior. No special tools are required to install and no extra training for the employees is needed.

Since colours and patterns can be selected from a wide range up to random on-of-a-kind there are many ways to create a totally unique appearance for a building or a room.

For a more traditional look the rough and gravelly surface can be painted with dispersion paint. This feature allows changes in colours over the years, like in ordinary mortar wall surfaces and still combine it with the advantages of dry-lining (no drying time).

### Innovative Aspects:

The surface resembles mortar, but is only 0,5-2mm thick and fully prefabricated without need for on-site fettling and drying.

Used as a surface for chipboards, alu-compounds and special plastic insulation panels these boards can be used as wall coverings and partition walls, but also for other interior work or furniture.

In comparison to plaster boards the surface is delivered fully finished and can be directly built into the metal profiles that are used for partition walls. The fitting can be done in the same way as with chipboard, MDF or HPL panels or based on glass with the typical fixtures for glass partition walls.

The product opens new markets for chipboards and laminates by appealing to more conservative buyers who do not buy the flat and shining surface of chipboards and laminates.

The thin layer guarantees a minimum use of resources, only very little resin is used and the main components – wood for the chipboard and sand for the coating – is sustainably available.

The additional weight is only 0,8-2 kg/m<sup>2</sup>, so the overall weight of the wall can be kept very low.

The sand structure on top of the board improves also the acoustic properties of the wall panel.

It is possible to include fire-retardant substances like aluminium hydroxid or to apply special paints (e.g. anti-graffiti).

The panels can double as heating system if an electric heating foil is included just below the sandcoating.

Technology Sector	<ul style="list-style-type: none"><li>- Construction Technology</li><li>- Building Components and Methods</li><li>- Wood Composites</li><li>- Material Science</li><li>- Construction Material</li></ul>
Application	<ul style="list-style-type: none"><li>- Construction and Building Products</li><li>- Manufacture of pre-fabricated buildings and systems</li><li>- Distribution of building products and systems</li><li>- Interior wall systems, partition walls, wall panels</li><li>- Other construction and building products related</li></ul>
Status of Development	Demo installations and working prototypes for interior and exterior, ready for market (manual production), available for demonstration
IPR	Secret know-how
Type of Cooperation	<ul style="list-style-type: none"><li>- License Agreement</li><li>- Sales &amp; Distribution Agreement</li></ul>

- Technical consultancy
- Financial Resources

# Type of partner sought

Industry partner that can incorporate the coating technology with his products, sales and distribution partners for major countries, investor

# Specific area of activity of the partner

Construction material producer, wood-processing industry, facade cladding producer, interior works, construction/building companies, partition wall producer.

# Task to be performed

Sought are the following co-operation partners

\* Industrial partners for developing and marketing industrial production

\* Commercial partners interested in establishing production / distribution channels throughout Europe. \* Investors interested in development and marketing of the concept. \* Designers or architects interested in working with alternative concepts of building materials.

Organisation      Consultant      Employees: 1-10  
Status              New, 26.4.2010