

Client SAU

We are searching for innovative, IP-supported, disruptive technology relating to liquid **filtration materials** for potentially disposable applications. Current products use non-woven and woven material substrates to achieve adequate filtration for varying levels of performance and cost – base substrates include thermoplastic polymers, cellulose based materials and PLA (polylactic acid). Our client is focused on finding an innovative, cost effective material to replace high performance (but expensive) woven substrates for filtration applications, and has shown an initial but significant interest in perforation technologies and materials.

Keywords

Perforated film, Mesh, Web, Scrim, Net, Apertured film, Breathable barrier film, Porous material, Permeable membrane, Non-woven / Woven substrate

Potential solutions could include:-

New bio-based materials requiring further processing

Processes (e.g. perforation) to convert existing substrates

Fully formed materials requiring no processing

Materials with changeable properties (e.g. permeable under certain conditions)

The client is interested in reviewing all opportunities, from early stage technology to commercially available solutions, but end material should meet the following characteristics (*we are interested to look at solutions that only partly fit the characteristics if they can be developed further*):-

- High degree of visual transparency / opaqueness
- Perforations (holes / slits, etc) to be 50-200 micron diameter
- Low cost – price should be less than €50 / tonne
- Biodegradable / compostable (preferably sustainably sourced)
- Food grade material
- High flow rate for liquids such as water (linear flow of >10 cm/s, using 50ml at 0.49KPa pressure)
- Thickness of material should ideally be between 45 – 65um
- Soft touch feel, not rigid (comfortable next to skin)
- Material should withstand standard, large scale commercial processing – e.g. cutting, thermal processing to 200°C
- Converting processes (e.g. perforation) should enable inline processing, preferably following manufacture to reduce converting cost

We believe potential solutions could be found in any of the following market / product sectors:-

- Converting – perforation, co-extrusion, multi-layer, texturing, modify visual and tactile effects, controlled porosity
- Industrial – filtration membranes, reinforcement materials
- Food industry – permeability films for MA (modified atmosphere) packaging
- Packaging – overwrap packaging
- Healthcare / Medical – wound care, bandages, filtration media
- Consumer – wipes / tissues

Our client is a £multi-million company specialising in the manufacture and supply of a range of consumer products. It is continually investing in its product development, and with extensive R&D facilities is well placed to further develop innovative technologies and take new products to its global markets. We are willing to explore any reasonable commercial arrangements, including licensing in of proprietary or innovative products, systems or technologies, strategic alliances or partnering arrangements etc.

Please send preliminary information on any proposed opportunity to – Mrs Elaine Rhodes, Operations Manager. Thank you!