

Technology Request

UK based biotechnology SME with antimicrobial nanomaterial seeks partners for technology scale up

Summary

A UK-based biotechnology SME has developed an antimicrobial nanomaterial aimed at the wound care market. Having completed proof of concept the company is developing the technology as a prototype and is looking for manufacturers and/or engineering companies to investigate scale-up production. The company is looking to enter into a commercial or manufacturing agreement with technical assistance to scale up the technology. Joint ventures and technical cooperation agreements will also be considered.

Creation Date	07 July 2015
Last Update	20 July 2015
Expiration Date	19 July 2016
Reference	TRUK20150707001

Details

Description

A UK-based biotechnology company specialising in nanoscience and nanotechnology is aiming to expand, combine, and utilise the knowledge and experience of nanoscience in healthcare sector. The company is researching on developing and producing novel solutions to healthcare questions.

To this end the company has developed an antimicrobial nanomaterial that it intends to target towards the advanced wound care market. This technology comprises of a novel one-step coating using a unique formulation.

The company has completed a proof of concept project for this material and is now looking to develop it further. Part of this process is examining the scale-up of the technology to determine commercial feasibility. To this end the company is looking to enter into partnerships with manufacturers or engineering and design companies that have experience of working with nanomaterials or advanced wound care products. The company expects this agreement to take the form of a commercial or manufacturing agreement with a degree of technical assistance to aid the scale-up process. Alternatively a joint venture agreement or a technical cooperation agreement will also be considered.

Technical Specification or Expertise Sought

The company is looking for partners with expertise in working with either nanomaterials or advanced woundcare products. Ideally the partner will have experience and expertise in the manufacture of such materials, and in particular in scaling up production from prototype stage to commercial

manufacturing.

Stage of Development

Project already started

IPR Status

Patent(s) applied for but not yet granted

Comment Regarding IPR status

The IPR status refers to the company's technology

Keywords

Technology

002007028	Nanomaterials
006001014	Medical Technology / Biomedical Engineering
006001024	Medical Textiles
006004	Micro- and Nanotechnology related to Biological sciences

Market

005006018	Other
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NACE

M.72.1.1	Research and experimental development on biotechnology
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Dissemination

Send to Sector Group

Healthcare

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

0

Already Engaged in Trans-National Cooperation

No.

Languages Spoken

English

Client Country

United Kingdom

Partner Sought

Type and Role of Partner Sought

The company is looking for an industrial partner that has experience and expertise in the manufacture of nanomaterials or advanced woundcare products. The company is looking for the partner to provide manufacturing capabilities for scaling-up their technology from the prototype stage to commercially viable quantities. The company would also expect the partner to provide technical assistance for the scale-up process.

Type of Partnership Considered

Manufacturing agreement
Commercial agreement with technical assistance
Technical cooperation agreement
Joint venture agreement

Technology Offer

An innovative artificial material for hernia treatment is offered.

Summary

Scientists from North West Poland has developed a new substance for hernia treatment. The new method is cheaper than flat mesh repair and shortens treatment and recovery time. The offered material changes its state from liquid to solid thanks to exposition on UV rays. It is also absorbed by tissues so it doesn't cause further complications. The researcher is looking for investor who has knowledge about medical industry and who will finance further technology development.

Creation Date	07 July 2015
Last Update	20 July 2015
Expiration Date	19 July 2016
Reference	TOPL20150630001

Details

Description

Polish scientists has developed a new method of hernia treatment based on an innovative polymer material.

The offered material can change from liquid (similar to honey) to solid but elastic state. This change is possible thanks to exposition on low-intensity UV rays. The material is neutral for human body. The new method allows to introduce liquid material in the proper place and then shape it. At the end it is harden by UV rays and after a while the implant is overgrown by tissue. The substance is absorbed and after a wound adhesion it stays no longer in a human body.

Technology is better solution than method of flat mesh repair that stays inside the body till the end of life and may cause a lot of different problems. The offered solution has been tested on animals and at this stage described properties are confirmed. New technology is much cheaper than the one used at the moment. Treatment time is shorter as well as production and application costs are lower.

The scientists are interested in establishing cooperation under financial agreement with an investor who has experience in medical industry. Apart financial support, the scientist is looking for help with gaining new contacts and moving in the medical business world.

Advantages and Innovations

- shorter treatment and recovery time - a patient can leave hospital in the day of surgery
- production and application costs are lower for even 50% compared to the method of flat mesh repair
- the substance is absorbed in the human body so it doesn't cause other health problems as it may

happen in case of flat mesh repair method
- the material is neutral for human body

Stage of Development

Field tested/evaluated

IPR Status

Patent(s) applied for but not yet granted

Comment Regarding IPR status

The offered technology is protected by European and US patent application.

Profile Origin

National R&D programme

Keywords

Technology

006001018	Surgery
006001022	Physiotherapy, Orthopaedic Technology
006001026	Medical Biomaterials

Market

005002006	Surgical implants
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M.72.1.9	Other research and experimental development on natural sciences and engineering
M.74.9.0	Other professional, scientific and technical activities n.e.c.
P.85.4.2	Tertiary education

Dissemination

Restrict Dissemination to Specific Countries

Austria, Belgium, France, Germany, Luxembourg, Netherlands, Switzerland, United Kingdom, USA,

Client

Type and Size of Organisation Behind the Profile

University

Year Established

1946

Already Engaged in Trans-National Cooperation

Yes

Languages Spoken

English

Polish

Client Country

Poland

Partner Sought

Type and Role of Partner Sought

The scientist is looking for an investor with experience in medical industry, who will help to the researcher expand network of contacts and who will invest money in technology development.

Type of Partnership Considered

Financial agreement

Technology Offer

A Japanese firm is offering a newly patented technology on peristaltic pumps for licensing or to be sold to EU companies

Summary

A Japanese firm is offering a newly patented technology on peristaltic pumps for licensing or to be sold to EU companies. The technology provides long-term reliable and precise pumping operation by keeping the flow rate of liquids constant during the pumping process. The technology can be applied to medical, bio and other scientific fields.

Creation Date	17 July 2015
Last Update	17 July 2015
Expiration Date	16 July 2016
Reference	TOJP20150713001

Details

Description

A Japanese consulting company is offering its own patented technology, an engineering data on the fundamental mechanism of peristaltic pumps, for licensing or to be sold to EU companies.

The technology provides long-term reliable and precise pumping operation and can be applied to medical, bio and other scientific fields.

A licensing agreement is expected with the potential partners who will be able to put the technology in practical use of manufacturing. The selling of the patent is also a considered possibility.

The patent has been already granted in Germany, the United Kingdom and France. However, they have no partners yet to collaboratively develop products using this patent or to transfer the patent to.

Advantages and Innovations

The technology offered by the company is the fundamental mechanism of peristaltic pumps.

The main feature of the pump is its non-contact to the liquid, thus minimising fatigues caused by the mechanical pressing force.

Their patented technology increases the pump's durability, compared to pumps currently available on the market.

In conventional models of peristaltic pumps, the flow rate of the liquid often changes, which might

also affect the mechanical strength of the tube part. This patented pump, equipped with high durability in the pumping mechanism, maintains a constant flow rate.

These functions are supported by engineering testing results made on pumps that have been built with this patented technology. The test results show an improvement of more than five times the average in flow rate stability and tube durability.

This pump technology can be adopted in medical infusion pumps, colour mixing pumps and biochemical processing tools that require handling of liquid without any contamination.

The technology was developed to improve conventional medical infusion pumps that have a potential risk of inaccuracy of medicine injection and are less reliable for long-term services in clinical use. The infusion pump using this technology contributes to reducing the incidence of irregular infusion of blood or miss-dosing of medicines. This way, mortal incidence of patients or serious physical damage requiring extended hospitalisation to recover can be avoided.

The controllable range of flow rate with this technology is wider than that of conventional pumps, so that various drugs can be infused with a wide range of dosing adjustment.

Stage of Development

Under development/lab tested

IPR Status

Patents granted

Comment Regarding IPR status

Patented in Germany, France and the United Kingdom through the European Patent Convention.

Profile Origin

Private (in-house) research

Keywords

Technology

006001014 Medical Technology / Biomedical Engineering
006002001 Biochemistry / Biophysics

Market

005007001 Electromedical and medical equipment
005007006 Laboratory equipment

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M.70.2.2 Business and other management consultancy activities
M.72.1.9 Other research and experimental development on natural sciences and engineering
M.73.2.0 Market research and public opinion polling
M.74.9.0 Other professional, scientific and technical activities n.e.c.

Dissemination

Send to Sector Group

Bio Chem Tech

Restrict Dissemination to Specific Countries

Austria,Belgium,Bulgaria,Croatia,Cyprus,CzechRepublic,Denmark,Estonia,Finland,France,Germany,Greece,Hungary,Ireland,Italy,Latvia,Lithuania,Luxembourg,Malta,Netherlands,Poland,Portugal,Romania,Slovakia,Slovenia,Spain,Sweden,UnitedKingdom,

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2011

Turnover

<1M

Already Engaged in Trans-National Cooperation

Yes

Experience Comments

The company has been working with North American companies to develop their business opportunities in Japan in the sector of medical devices and solar systems for several years. They also provide Japanese clients with necessary support for market development in the USA as well as consultation services for investment in the USA.

Languages Spoken

English

Client Country

Japan

Partner Sought

Type and Role of Partner Sought

Companies in the sector of medical, bio, pharmaceutical and scientific equipment of any size and type.

The company expects that the potential partner would be completely adopting the technology for commercialisation.

Type and Size of Partner Sought

SME 11-50, University, R&D Institution, SME <10,>500 MNE, 251-500, SME 51-250, >500

Type of Partnership Considered

License agreement