

Partnering Opportunity

Profile status : Published

Research Development Request

H2020-EIC-FTI-2018-2020 - Looking for a design and engineering company with experience in software for 3D modeling and failure modes analysis to develop and produce an innovative and eco-friendly umbrella

Summary

An Italian company created an eco-sustainable umbrella, 100% recyclable, with a unique Italian design and featuring a patented innovation that makes it more durable.

The SME have already created a first model to enter the market by the end of 2020 and is planning to develop two new models.

To carry out the project the SME is looking for a design and engineering company with expertise in software for 3D modeling and failure modes analysis and interested to be part of a FTI project.

Creation Date 07 August 2020

Last Update 26 August 2020

Expiration Date 15 September 2020

Reference RDIT20200807003

Public Link <https://een.ec.europa.eu/tools/services/PRO/Profile/Detail/c14b1ca1-8807-4547-9fee-eab570c6dac8>

Details

Description

An Italian company designed and patented a new umbrella, entirely made with a technical polymer that guarantees, at the same time, great strength and rigidity of the poles and excellent flexibility of the arms.

The use of a unique polymer makes the umbrella 100% recyclable as it could be easily recovered and reused for

the manufacturing of new products.

The aim of the project is to enter the market with the first umbrella model - the "Compact" - by the end of 2020. Two other models will be developed in sequence - the "Pocket" and "the Long" - and they will be launched at the end of 2021 and 2022 respectively.

For this purpose the company is setting up a consortium for the production of the umbrella in Eastern Europe in order to make it fully operative by mid 2021.

The Italian SME is looking for a foreign design and engineering company with experience in software for 3D modeling and failure modes analysis and interested to be part of a FTI project.

The partners consortium will also include a plastic manufacturer, a company with expertise in fabrics' cutting and sewing in Eastern Europe, a sales and marketing specialist with expertise in fashion sector.

The Italian company will manage the project as coordinator and will make available to the consortium the final prototype, built in his laboratory in China, the technical skills acquired in the field of umbrella manufacturing and the network of distributors.

The expected duration of the project is 24 months.

The EOI deadline is September 15th, as the company intends to apply the call H2020-EIC-FTI-2018-2020 expiring on October 27th 2020.

Advantages and innovations

The target of the company is to create the world's first 100% recyclable umbrella, as simple to recover as an empty plastic bottle, by using a specifically developed technical polymer for each single component, chosen to be easily recovered and reused for new products manufacturing.

This material, combined with an injection moulding production method, uses significantly less energy (-48%) and releases far fewer greenhouse gases (-76%) during manufacturing, making the umbrella highly eco-sustainable when compared with traditional ones.

The patented geometry and part reduction creates a more reliable and longer-lasting umbrella whose flexibility makes it better able to resist to wind stress. This means further pollution decrease coming from damage and disposal, as well as more satisfied customers.

Moreover, the adopted manufacturing technology allows to easily change the colour of each single component, giving end users the opportunity to create their own unique and customized umbrella.

With these innovations in components, materials and assembly, the company has significantly lowered the manufacturing costs such as to make mass production within Europe not only technically feasible but also economically competitive.

As a plus, a significant number of jobs will be created in Europe, contributing to the growth of the whole community.

Stage of development

Available for demonstration

IPR Status

Patent(s) applied for but not yet granted, Patents granted, Trade Marks

Keywords

Technology

02007014	Plastics, Polymers
10002006	Ecology

Market

07002002	Clothing and shoe stores
07002005	Other retailing
07004001	Clothing, shoes and accessories (including jewellery)
08001016	Commodity chemicals and polymers

Network Contact

Issuing Partner

ZACHODNIOPOMORSKI UNIWERSYTET TECHNOLOGICZNY W SZCZECINIE

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Open for EOI: **Yes**

Dissemination

Relevant sector groups

Creative Industries
Environment
Materials
Retail
Textile and Fashion

Client

Type and Size of Organisation Behind the Profile

Industry SME <= 10

Year Established

2016

Turnover

<1M

Already Engaged in Trans-National Cooperation

No

Languages Spoken

English
Italian

Client Country

Italy

Partner Sought

Type and Role of Partner Sought

The partner sought is a foreign design and engineering company that will be in charge of the designing, engineering, prototyping and testing, both each single plastic component and the umbrella as a whole, through the use of software for 3D modeling and failure modes analysis.

Type and Size of Partner Sought

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

Type of Partnership Considered

Research cooperation agreement

Program - Call

Framework Program

H2020

Call title and identifier

H2020-EIC-FTI-2018-2020

Coordinator required

No

Duration

24 days

Deadline for EOI

15 Sep 2020

Deadline of the Call

27 Oct 2020

Attachments
