

Entrepreneurial ID «venture leaders» 2012



Name: Yann Tissot

Contact: yann.tissot@a3.epfl.ch

Project/ Company name: L.E.S.S. - "Light Efficient SystemS"

Short description:

Our patented nanostructured fiber enables the implementation of energy-efficient illumination systems. These devices are particularly well adapted for the design of novel low-power consumption backlighting units used in portable LCD systems (tablet PCs and notebooks).

Web site: www.less-optics.com

Industry: Nanotechnology, optics

The Start-up

The one-liner: "Efficient LCD backlighting for longer battery life, with one single nanostructured fiber"

Status : The company will be created in April 2012.

Company / team size: 2 (at start)

Problem / Solution:

Mid-size displays as found in tablets (e.g. iPad) and future notebooks are backlit with a large number of white-light LEDs that emit heat in addition to light. L.E.S.S. aims at developing, manufacturing and marketing a single backlighting nanostructured fiber that emits more light and less heat, which potentially either increases the battery life or make possible the use of faster processors on the same battery.

Market Opportunity / Target customers:

Our target customers are the LCD panels manufacturers and our target market is the market of backlighting units dedicated to the portable LCD systems of middle size (typically from 7 to 20-inch) that represented over \$4.3B in 2010.

Competition and competitive advantage:

Our technology offers a unique lighting uniformity and luminous efficiency while being scalable at low cost. These three assets address the key limitations of today's backlighting units based on white-light LEDs and possibly go beyond the specifications of OLEDs in the future high-resolution displays used in tablets and notebooks.

Financing: We are currently self-financed. We acquired about \$350K of seed money through grants and loans to develop demonstrators. We want to raise \$4.2M by the end of the year through VCs for advanced prototyping.

Growth objectives: We expect sales over \$110M with an EBIT over 30% and a team of 48 people by 2017

US objectives We aim to refine our business strategy, increase our network in the US and meet both VCs and experts in business development

Description:

How about generating white light with less energy and distributing it with fewer components? Our technology makes it possible with a great flexibility.

L.E.S.S stands for our core proposition: « Light Efficient SystemS » and one single nanostructured fiber potentially backlights a LCD from 7 to 20-inch! A first international patent application (PCT) has been filed and customer's validation is on-going. In addition to displays, our systems can be used in multiple applications that need high degree of light uniformity in a compact form such that representing a potential market over \$12.6B by 2015.



The team

Dr. Yann Tissot has always been keen in exploiting new ideas and facing new challenges. He comes back from several years in the industry in various countries (US, UK, DK, and CH) to undertake this venture. This former competition swimmer successfully led multi-millions projects in telecommunication, space and optics in established companies (GNResound, Intel Corp., Oerlikon) and a start-up (Optotune). Following meetings with customers he realized the tremendous potential of parallel researches he made in the past. After a period of analysis, market validation and informal customer meetings, he decided to seek the support of a strong team player to bring the idea to a successful project. He found his counterpart as Dr. Simon Rivier who was researcher in Germany (Max-Born Institute). As he joined the team, he brought all his academic background to speed up the development of the idea. We split responsibilities in terms of business and technical development, gathered an experienced advisory board to support us in our weaker areas of expertise and decided to make the company in April 2012.