FJORD INDUSTRIES AS

CALL FOR GLOBAL INDUSTRIAL PARTNERSHIP

The Norwegian FJORD[™] Group with Fjord International[®] and PolyDisplay[®] owns a unique and protected technology for the production of dynamic Vindauge[™] with absolute clarity, full shielding and/or any shade of gray. The system also opens for other products like digital signage: warning signs, traffic signs and advertising signs.

The ID^m module (ImageDisplay[®]) production for Vindauge^m is scheduled to begin in 2015/16 and will initially meet the needs of the Scandinavian market. We are looking for a world leading partner to join & expand in Europe and globally.

Vindauge[™], the viking word that became "window» (see pictures of 14 year old prototype, working within -40 to + 80°C), consist of one or more ID[™] modules (2 layer cell of processed sheet glass where the space between the glass surfaces is filled with a liquid memory fluid named EASL DMD^{TM1}) which, when exposed to Electric Field (EF), change the property from clear up to 90 % opaque, and vice versa.

Addressed EF applied with time and frequencies creates any level of gray in the whole, or any part, of the window for opening, closing, blinds, text or any graphics. This will guide all visible light, so all/any color(s) are seen and/or manipulated. The molecular position is stable in any position without power (nano technology), and we have 30 year old prototypes still displaying original pictures.

You have now entered a wireless

Connected to a PC, it is possible to write and produce/alter image/shades in the Vindauge[™]. This enables new dimensions for architectural building design, light guidance for information, visibility and solar energy control, as well as dynamic advertising in shop windows and public information notification in glass facades and signs, such as Traffic, Tourism and public warning, e.g. Tsunamis.

The EASL DMD[™] technology is situated between LCD, PDLC, other FPD technologies and traditional print-on-paper. It is actually a digital memory device seen from the processor which may read-back the molecular position within the Vindauge[™]/PolyDisplay[®] and thus increase efficiency and safety at a system level dramatically. Energy footprint is low, for manufacture, use and recycling. Readability is equivalent to print on paper, and is outstanding in bright sunlight. Energy is only required when whole or part of the display is altered. For most applications and places integration with solar cells/energy is ideal, also **in** a SmartGrid solution of MobileDisplay[®] systems. Remote control via IP-address radio system will provide a new paradigm of whole facades, buildings, cities and society/public security architecture – without external cables!

¹ Electrically Addressable Smectic Liquid Daylight Memory Display

EASL DMD^m will open a new global business paradigm of very high magnitude, holistically within glass (later plastics and "paint"), electronics, chemicals, computers, communication, design, architecture – to mention the most important technology and industrial areas. Within buildings and facades, believed to be the largest single area, the global market potential is up to 5 billion m² per year. Towards this market we foresee price of 50 EUR/m² for end products.

We have identified a pilot production partner who will allow production of 50.000 m² per year allowing sales with at 300 EUR per m². The technology is ready for the first applications, because of its robustness and long time testing (30 years including early own LCD factory in Norway, whole year roadside testing in Norway and Sweden in 2007/8 and confirmation by SINTEF 2014).

As our global partner, with Vindauge[™] you may cover a need that is already present. The EASL technology requires few material and production components. Produced with the largest flat glass cells, and even in flexible materials, you may redefine awnings, Venetian blinds and roller blinds, and add new dimensions for your profit and environmentally sustainable business.

Public notification is made easy with info-boards, windows and siding/walls. By arranging several ID[™] modules in a SmartGrid matrix, important information can be spread quickly over large geographical areas. Signs and info-boards positioned anywhere without cables, and operated by solar cells/battery. Info is sent wireless via SMS and IP-addressing.



The Fjord Group has been developing its concepts, trademarks and EASL technology since 1984, and has invested 100 MEUR in addition to a high number of prototype projects with car makers in Europe, as well as Eureka Prometheus and military projects. As a small company in a country that has been blessed with oil and gas industry in this period, we realize that we need to find the right global industrial partner and investor.



Our holistic slogan; Redefining Display by Managing Light™, has deeper meanings!

History, position and organization

AutoDisplay AS (AD) was established by leading bank DNB and industry leader Norsk Hydro (Dyno) in 1984, when Norway wished to establish new IT-industry – before oil and gas soared.

Thor G Kamfjord (TGK), with background as data engineer & EW signal officer from NATO, was recruited from Norwegian IT & automotive part companies Norcontrol and Kongsberg in 1985, to lead the Autodisplay venture. He designed and patented the PolyDisplay, Vindauge[™] & PolyFlex product concepts and introduced reconfigurable flat displays for instrumentation and navigation into the Car industry in Europe with solid help from 100 employees in Europe & USA.

When subsequent demand for industry was raised, due to order for volume production, the Asians outcompeted us all – except US material suppliers as 3M and Corning.

In addition to a large number of prototype pilot projects, we built two LCD laboratories and a production line, was offered acquisition from the car supplier industry, and acquired the UK EASL optical computing & display technology from STC when ITT went bankrupt in 1988.

Since 1991, TGK has founded the organization below, and through many projects, worth 50 MU\$ plus the equivalent in equity and R&D, we have established our current vulnerable but extremely promising technology position. And thus we acknowledge the need to partner with a global industry leader.

