Moving towards a More Advanced Optical Business

TV sets, personal computers and cellular phones are indispensable items in our modern lives. The Nitto Denko Group is an international top supplier of products used by manufacturers of liquid crystal display (LCD) panels. Both polarizing films and retardation films are used in the production of LCD panels.

Market Circumstances

Following on from fiscal 2006, the liquid crystal display (LCD) panel market, with its focus on LCD televisions, personal computers and cellular phones, has built on previous solid growth throughout fiscal 2007. With the developments that have occurred in the new manufacturing process building in the Onomichi Plant, we have managed to achieve an increase of 20% over the last year in spite of adverse conditions relating to the appreciation of the yen. Despite other concerns relating to such things as the sub prime loans slowdown, further strong market growth looks promising in the LCD business.

Advantage of Our Business

Our advantage lies in our technical capabilities given that we are able to combine core technologies such as polymer synthesizing and processing with more than six hundred technological applications. Additionally it is also to our advantage that we have a vertically integrated business model, where every aspect of design, development, experimental manufacture, manufacture and sales of optical film such as polarizing film and retardation film is carried out within the group. In fact, Global Niche Top products have been produced through using "advanced technologies" such as retardation film which has an optical compensating function, polarization conversion film which recycles light and products with processing surface treatment, thereby reducing panel glare.

As we set up manufacturing and sales bases close to customers in Japan, Taiwan, Korea and China, we will be able to extend our marketing activities globally. This will allow us to collect invaluable market research, so that we can then analyze and use it to adjust our business accordingly. In effect it will allow us to keep our fingers on the "business pulse".

Shift in Strategy

The LCD panel market has not yet reached its peak. We are planning and strategizing on the basis that it is likely to do so in the near future. Apart from sticking to conventional marketing approaches of securing shares with preceding competitors in business investment, we aim to reform and improve our production processes and materials used. This will make it possible for us to supply big screen TV or small and medium sized LCD panel producers with a range of different and improved products. Examples of such product advancements include; the development of transparent conductive films used for touch panels in game machines which use pen-based input technology, cellular phones and mobile computers, optical films for super sized information displays of over one hundred inches in size and optical films for in-car devices where high durability is required given their outdoor application.



Optical film for high-definition LCD



Transparent conductive film (ELECRYSTA®)

Percentage of Sales in Our Optical Business

