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**AGC launches sales of FONTEX™ a commercial plastic optical fiber enabling world's highest transmission speed: Excellent usability and optimal choice for wiring in next-generation 3D televisions and so forth**

**AGC** Asahi Glass Co., Ltd.

AGC (Asahi Glass Co., Ltd.; Head Office: Tokyo; President & CEO: Kazuhiko Ishimura) plans to start sales of FONTEX (the name is derived from a word meaning "fountain of light"), a new fluororesin-based plastic optical fiber (POF), starting July 2010. FONTEX is the world's first optical fiber product that **combines high-capacity data communication** at speeds of 10 Gbps (Gigabit per second) **and secure data transmission** even when bent, which is something we could never have dreamed of achieving with the existing silica optical fibers. Because of this feature, FONTEX is easy to use and secure even for use at home, where it is likely to be handled roughly by for example being stood on or bent.

AGC participates in a research project titled "Plastic optical fiber for world's highest data transmission speed," which was initiated by Professor Yasuhiro Koike of Keio University and decided to secure a grant from the "Funding Program for World-Leading innovative R&D on Science and Technology" effective March 9, 2010. We will aim at achieving a further ultra-high transmission speed (40 Gbps or above) on a volume production level and also strive to develop an optical communication system for each application including cables and connectors.

Makers of full-spec. **high-definition televisions** and **3D televisions**, which have been drawing public attention recently, are planning to advance image technology further, and we expect that a capability for high-capacity data communication at high speed will be required in the near future. In September 2009, Intel Corporation announced **Light Peak**, a new interface for optical transmission through an optical fiber cable instead of copper cable, and high-capacity data transmission is becoming a must for connecting peripheral devices to computers. In the meantime, optical interconnection is starting to be used for connecting devices such as servers and storage devices **in data centers** to attain high-speed and low-power-consumption data transmissions. In addition, optical wiring is being studied for adoption in other fields such as **the medical field** because of its feature of generating no electromagnetic noise, and **the automotive field**, which needs lightweight materials. This has given rise to a major trend of shifting to optical communications in the communication industry. The market of commercial optical cables for consumer electronics (excluding those for social infrastructure) is expected to develop rapidly in future, and there is an estimate that it will grow to a new market worth 150 billion yen in 2015.

In the midst of this expansion in the optical communications market, AGC began shipping samples of the new fluororesin-based plastic optical fiber in March 2009. The product has been highly evaluated by our customers in various industries. In addition, with increasing needs to shift to optical communications, we have recently decided to release the new product FONTEX.

FONTEX has the following characteristics:

i) Advantages that optical fibers (silica optical fibers, FONTEX) have over the existing copper cables:

- Allow high-speed and high-capacity data transmissions at **10 Gbps** with one thin optical fiber
- Achieve energy-conservation through **low-power consumption**
- Available for use in the medical field owing to the electromagnetic-noiseless feature
- Capable of reducing the weight of a cable to less than one-third of the existing copper products
- Enhanced designability and flexibility of design realized by reducing the cable diameter

ii) Advantages that FONTEX has over silica optical fibers

- High potential for further high-speed transmission by lower material dispersion derived from fluororesin origin.

- Offers **ease of handling and flexibility** in wiring design with its feature of plastic-specific robustness, and is capable of data transmissions **when knotted or bent**
- Allows low-cost connector connection because core diameter and outside diameter of fiber can be changed arbitrarily
- Enhanced workability of terminal treatment of cables because it is safe and never breaks or get stuck

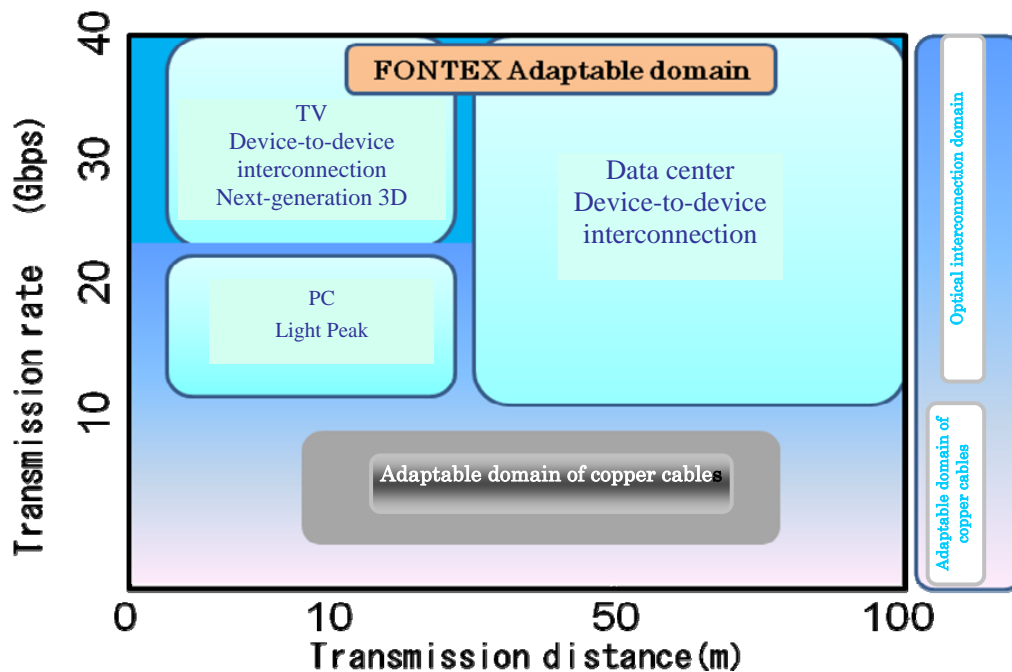
This new FONTEX product evolved from fluorine chemical technology, one of the core technologies of AGC's chemicals business. AGC has pursued research and development for plastic optical fibers jointly with Professor Yasuhiro Koike of Keio University, and has a good track record in introducing optical interconnection systems in condominiums, hospitals and data centers since 2000, receiving high acclaim. FONTEX is a new product with a high performance that matches the needs of the new era, developed by evolving the technologies we had accumulated. Concurrently with the release of this product, we will renovate the existing manufacturing facilities in our Keihin Plant (Tsurumi-ku, Yokohama City) to prepare for its volume production.

AGC will venture into the markets for optical cables for home information appliances that meet the needs for shifting to optical communications and other wide-ranging fields in the forthcoming digital society which requires large-volume data transmissions. We will accelerate the release of new products by leveraging our marketing and development capabilities.

- For further information regarding this issue, please contact Toshihiro Ueda, General Manager, Corporate Communications & Investor Relations, **AGC** Asahi Glass Co., Ltd. (Direct inquiries to: Kenichi Oda; Telephone: +81 3-3218-5260; E-mail: infor-pr@agc.co.jp)

#### Reference material

1. Market trend shifting from copper wiring to optical interconnection.



2. Full-spec. high-definition: Displays with  $1920 \times 1080$  pixels. They have a higher definition than existing TVs and transmit a larger volume of data.

3. 3D television: Three-dimensional TVs that can display special images. As they need to transmit image information for the left eyes and right eyes separately, they need to send more than twice the amount of information as the existing two-dimensional TVs or produce a less clear image with the same amount of information.

4. Light Peak: A new optical transmission interface announced by Intel Corporation at the Intel Developer Forum 2009. It interconnects high-definition displays and peripheral devices of computers through optical fibers.