

L'ORÉAL

L'Oréal And Stmicroelectronics Applying Semiconductors To Skin Aging

Companies are developing a chip-based product to measure human-skin hydration levels

Paris, 18th October 2002 – STMicroelectronics announced today the first use of semiconductors in the development of next-generation skin care. L'Oréal, a world leader in cosmetics, is using ST's TouchChip silicon image sensor technology in an innovative research project to develop methods to quickly and easily provide detailed hydration analysis of human skin.

The SkinChip® sensor, being jointly developed by the two companies, is based on ST's TouchChip, developed for use in biometric fingerprint recognition applications. With over a quarter million units shipped, the TouchChip is the most industrialized of the new generation of silicon sensors currently revolutionizing many security and convenience applications. The SkinChip® compact silicon sensor captures detailed, 500-dots/in. images of the skin in less than one-tenth of a second, under any skin or environmental conditions.

The 90,000 active cells of the sensor provide high-quality image definition with a resolution of 50-microns, which is perfectly suitable for providing a detailed image of the micro-relief of skin. The sensor will be integrated into a compact device with low power consumption, suitable for portable application.

ST's TouchChip, on which the SkinChip® is based, is a capacitive sensor that uses active capacitive pixel sensing technology. When used in conjunction with specially developed image capture software, the sensor will generate a 'capacitance' map that can easily be converted into a hydration or dryness map. Assessing how dry or well-hydrated the skin is will allow cosmetologists to design beauty-care products better suited to age-related changes of skin.

The two companies spent several months adapting the existing standard software used with the TouchChip sensor in fingerprint applications to work on areas of human skin that are dryer than fingertips, such as on the face under the eyes, as well as jointly developing and optimizing image capture software to work with the sensor.

Additionally, L'Oréal has further developed image analysis software for the application. The first software, developed by L'Oréal in conjunction with another research laboratory, detects orientations of lines in the micro-relief of the forearm. This parameter correlates to skin aging. Two further software programs are currently in development by L'Oréal: one for quantifying the actual hydration of the skin; and the second for measuring the 'texture' of the skin.

According to L'Oréal, the SkinChip® sensor is currently being applied to cosmetics only, but could possibly be used in other dermatological applications in the future.

“Because the TouchChip provides a greyscale image of skin with unparalleled detail and sensitivity, it lends itself well to this unique and innovative application,” said Alan Kramer, Director of ST’s TouchChip Business Unit. “L’Oréal’s SkinChip® innovation promises to be a further advance in using leading-edge technology to help people look young.”

“The SkinChip® is an important new tool among non-invasive methods that will increase the knowledge of age-related skin changes and will allow us to greatly improve our ability to battle the effects of aging on appearance,” according to Jean-Luc Lévêque, L’Oréal’s Prospective Research Director. “L’Oréal’s application of ST’s sensor is a very exciting development.”

About L’Oréal

Founded nearly a century ago by the chemist Eugène Schueller, L’Oréal has consistently applied its policy of investing in research, ensuring that its products meet the highest possible standards of quality, safety and innovation. Today, the L’Oréal Group contributes to the beauty of women and men all over the world, providing everyday solutions that enhance their sense of well-being.

- The L’Oréal Group is the number one cosmetics company in the world, present in 130 countries with a worldwide turnover of 13.7 billion euros in 2001 and a staff of almost 50 000.
- The Group focuses on 5 core activities: hair colour, hair care, skin care, make-up and perfumes.
- L’Oréal offers consumers all over the world a culturally diverse portfolio of brands such as L’Oréal, Garnier, Maybelline, Redken, Lancôme, Helena Rubinstein, Biotherm, Vichy, La Roche-Posay, Soft Sheen Carson, Matrix, Kiehl’s, Shu Uemura, Ralph Lauren, Giorgio Armani and Cacharel.
- The Group’s brands are present in every distribution channel: mass market, professional hair salons, selective distribution, pharmacy, internet and mail order.
- Since the outset, L’Oréal has chosen to base its success on technological innovation. Over the past decade, the L’Oréal Group has invested 3% of its turnover (2.6 billion euros) in research and development. Research laboratories located in France, United States and Japan focus on skin, hair and colour: more than 110 original molecules have been developed by our laboratories and are used in the Group’s products; more than 3,000 new formulae are launched every year; 493 patents have been applied in 2001.

About STMicroelectronics

STMicroelectronics (NYSE:STM), the world’s third largest independent semiconductor company, is a global leader in developing and delivering semiconductor solutions across the spectrum of microelectronics applications. An unrivalled combination of silicon and system expertise, manufacturing strength, (IP) Intellectual Property portfolio and strategic partners positions the Company at the forefront of System-on-Chip (SoC) technology and its products play a key role in enabling today’s convergence markets. The Company’s shares are traded on the New York Stock Exchange, on Euronext Paris and on the Milan Stock Exchange. In 2001, the Company’s net revenues were \$6.36 billion and net earnings were \$257.1 million. Further information on ST can be found at www.st.com.

L’Oréal Contacts:

Journalists

Lorrain KRESSMANN

+331.47.56.40.24

Scientists

Patricia PINEAU

+331.47.56.44 04

Shareholders and market authorities

François ARCHAMBAULT

+331.47.56.83.45

Investors contacts

Caroline MILLOT

+331.47.56.86.82

STMicroelectronics Contacts :

Journalists

Mariagrazia PRESTINI

+39.039.603.5901

Michael MARKOWITZ

+1.212.821.8959

Investors

Benoit DE LEUSSE

+334.50.40.24.30

Stan MARCH

+1.212.821.8939

About L'Oréal

L'Oréal has devoted itself to beauty for over 100 years. With its unique international portfolio of 34 diverse and complementary brands, the Group generated sales amounting to 25.8 billion euros in 2016 and employs 89,300 people worldwide. As the world's leading beauty company, L'Oréal is present across all distribution networks: mass market, department stores, pharmacies and drugstores, hair salons, travel retail, branded retail and e-commerce.

Research and innovation, and a dedicated research team of 3,870 people, are at the core of L'Oréal's strategy, working to meet beauty aspirations all over the world. L'Oréal's sustainability commitment for 2020 "Sharing Beauty With All" sets out ambitious sustainable development objectives across the Group's value chain. www.loreal.com

"This news release does not constitute an offer to sell, or a solicitation of an offer to buy L'Oréal shares. If you wish to obtain more comprehensive information about L'Oréal, please refer to the public documents registered in France with the Autorité des Marchés Financiers, also available in English on our Internet site www.loreal-finance.com.

This news release may contain some forward-looking statements. Although the Company considers that these statements are based on reasonable hypotheses at the date of publication of this release, they are by their nature subject to risks and uncertainties which could cause actual results to differ materially from those indicated or projected in these statements."

Contacts L'OREAL (switchboard + 33 1.47.56.70.00)

Individual shareholders and market authorities

Jean Régis CAROF
Tel : + 33 (0)1.47.56.83.02
jean-regis.carof@loreal.com

Financial analysts and institutional investors

Françoise LAUVIN
Tel : +33 (0)1.47.56.86.82
francoise.lauvin@loreal.com

Journalists

Stéphanie Carson-Parker
Tel : + 33 (0)1 47 56 76 71
stephanie.carsonparker@loreal.com

For further information, please contact your bank, stockbroker or financial institution (I.S.I.N. code: FR0000120321), and consult your usual newspapers or magazines or the Internet site for shareholders and investors, www.loreal-finance.com, the L'Oréal Finance app or call the toll-free number from France: 0.800.66.66.66.

Anne-Laure RICHARD
Tél : +33 (0)1.47.56. 80.68
annelaure.richard@loreal.com

Polina Huard
Tél : +33 (0)1 47 56 87 88
polina.huard@loreal.com

Vanessa Wang
Tel : +33 (0)1 47 56 76 88
vanessa.wang@loreal.com