

Frans Greidanus

Programme manager Storage Solutions

Philips, the inventor of the CD, traditionally has a very strong position in the field of storage, Frans Greidanus said in Circle of March 2003. This was illustrated by the success of DVD+R/RW. Philips' position has become even stronger with options like double-layer DVD+R and 16x DVD+R recording speed. Frans likes to keep it this way or even make it better.

The groups of the Storage sector - Storage Signal Processing (Kees Schep), Optics & Mechanics (Coen Liedenbaum), Storage Physics (Jos van Haaren) and Storage Systems & Applications (Wouter Leibbrandt) - participate in the Storage Solutions Programme, as well as the group of Simon Blanchard in Shanghai. Frans: *There is very intensive contact with this group with a regular exchange of people and we have an expatriate, Henk Goossens, in Shanghai.* Since patent generation is of prime importance in the Programme, Wiel Deguelle from Intellectual Property & Standards (IP&S) is a member of the Programme Management Team.

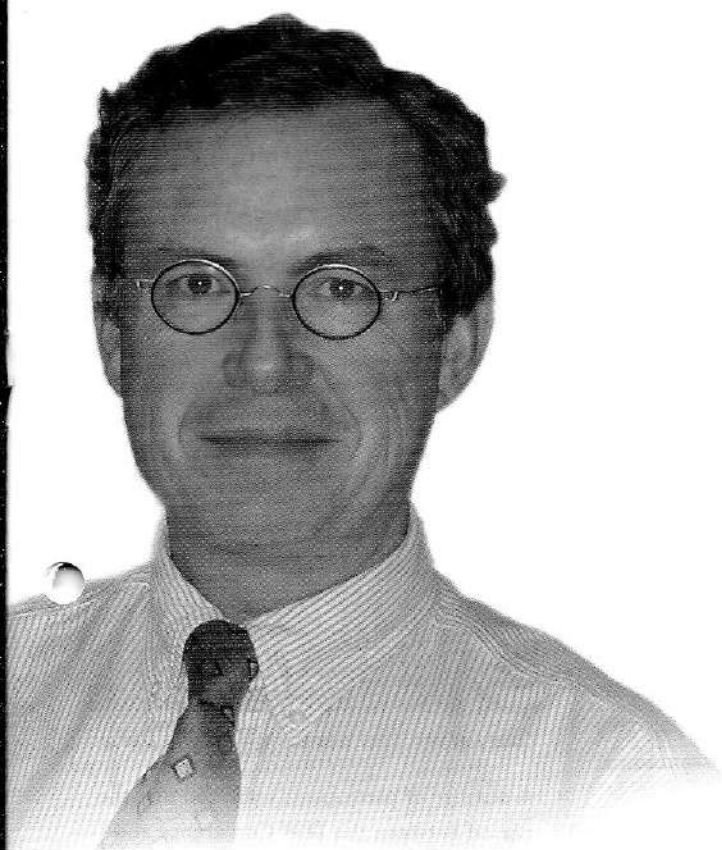
more value for Philips than we invest and we want to open up new business opportunities beyond Optical Storage. We work hard to belong to the top three research organizations for storage in the world.

We investigate technologies for personal storage and retrieval of digital content in a safe, convenient and durable way, at home and on the move

What is the vision, mission and main strategy?

Our vision is that ubiquitous storage and access to digital information will become an integral part of the Ambient Intelligence environment and will enable further proliferation of information at any time and place. Our mission has been derived from the Research mission in a natural way: we want to create value and growth for Philips in storage technologies, systems, applications and standards. Our competitive position should be further improved. Our ambition is to create substantially

Our main strategy is to carry out innovative research to realize our long-range technical objectives in the domains of *Storage Basic Engines* (Smart drives, Blue-ray Disc Family, Breakthrough Storage, Solid-state Storage) and *Storage Systems* (Stationary Storage, Mobile Storage, Content Management). We want to build and sustain a strong IP position and actively contribute to standard settings and explore new storage technologies, driven by applications. But we also strongly encourage bottom-up initiatives by our researchers.



How do you see your role as programme manager?

My main task is to realize our vision and create the direction of the Programme. To achieve this, I take care of a good balance between short-term and long-term activities and a good cooperation between the groups involved. A solid cooperation with the PDs is of ultimate importance. Furthermore, I encourage my people to develop a strong focus on the external world and actively interact with outside parties. Last but not least, I see it as a key role to motivate my people, as they make it all happen.

What are the important activities at the moment?

In *Storage Basic Engines*, the current Blu-ray activities are very important for Philips. Together with IP&S, Philips Optical Storage and CE, we play a key role in the standardization of the next-generation Blu-ray. But also improvements are still made in DVD+R/RW products:

- In cooperation with MKM, we have developed double-layer DVD+R, which increases the storage capacity from 4.7 to 8.5 Gbyte while remaining compatible with existing DVD-Video players and DVD-ROM drives.
- We have developed a DVD+R system with the world's highest ever recording speed. This system is able to record 16 times faster than the normal playing speed of video DVDs and allows a DVD+R to be burned with video or data up to the maximum capacity in less than six minutes.

In *Storage Systems*, content management is very important. The explosive growth of multimedia assets is still asking for advanced methods for content management, including browsing, navigating and retrieval. Searching for skilful methods to play with data will always be important. In the Cassandra project, we are developing content analysis algorithms and systems to generate metadata locally on Philips Nexperia platforms. It includes analysis of still pictures, movies, speech and music. The in-home, mobile and handheld consumer appliances of the future will be equipped with these new functions.

A recent project that attracted a lot of attention is Portable Blue, a miniature version of Blu-ray. Unfortunately, this project has been stopped because in the next phase high investments would be needed and possible benefits would not outweigh the risks. We are still proud of the new technologies that have been developed. The project has had many spin-offs and there may be possibilities to capitalize on the patents generated.

What is your opinion about cooperation with other companies?

Standardization plays an important role in Optical Storage. We set standards, together with other international electronics companies, e.g. with nine of them for the Blu-ray standard. We have intensive contacts on a regular base. But there are also other reasons to cooperate. We cannot afford to do research in isolation, because things are too complex and too expensive. We have to exchange research results and work in an open and innovative way. Contacts and cooperations, also with suppliers, are a must.

What is your opinion of programme management?

The advantage of programme management is that there is one direction and a single set of balanced activities and no duplication. Everybody is looking at the same target. Everyone feels part of one larger activity.

What do you like most in your work?

I enjoy most working together with highly skilled professionals on a daily basis. I am proud of what we achieved in the past few years and experience it as a privilege to be responsible for the Storage Solutions activities in Eindhoven and Shanghai.