EXHIBIT 5

T_Vision Video Transcript (terra1995_pal)

T_Vision is a telecommunication research project. It provides a virtual globe as a multimedia interface to visualize any kind of data related to a geographical region. The virtual globe is modeled from high resolution spatial data and textured with high resolution satellite images. A T_Vision database, a real time rendering system, and a specific telecommunication concept has been developed to handle this infinite amount of data.

We are just approaching Japan; flying over Tokyo Bay and now heading towards Mount Fujiyama. T_Vision's specific concept of seamless links between different levels of detail allows the continuous zooming from a global view down to recognizable features of only a few centimeters in size. To enable this, we developed a renderer which asynchronously loads levels of detail into the memory dependent on how close our view of the Earth is.

By switching the surface off, we can observe this process more easily. As the distance between us and the Earth increases, the high resolution data is removed from the memory and is replaced with new data for the wider field of view. Out of these different levels of altitude data, we compute the tectonic surface of the Earth and then project the corresponding satellite images onto it. An asynchronous and anticipatory loading strategy always guarantees a steady frames per second. A combination of two interfaces is used to navigate around this virtual globe and interact with it. A space mouse is used to control the user's position and angle of view in relation to the Earth, but in order to move the Earth itself a so-called Earth tracker was developed.

On the virtual globe, any kind of geographically-related data can be incorporated, whether static or dynamic. Ecological, sociological and political data could be visualized to provide decision-makers with a comprehensive interface for assessment, risk evaluation, and planning in a wide variety of fields. For example, the latest satellite cloud images from weather forecasting providers can be integrated into the system over an ATM Link. The user thereby has full control over which information to view, at what time, and at which location.

We are now approaching the West Coast of the U.S. Here we request weather data and get an immediate ATM connection to a weather server, which provides the current temperature data for this region. Any kind of 2D visual information can be presented on these so-called information actors which are displaying temperatures here. Alongside the telecommunicative integration of these various layers of information, the T_Vision project is based on the concept of a transparent and worldwide broadband network topography and service databank. Because of the impossibility of locally storing and constantly updating all the high resolution data necessary for such visualization applications, the system automatically establishes an ATM connection to the server which provides the most up-to-date and highest resolution data required for the current field of view. For example, we have approached Berlin but the data necessary for visualizing the city isn't available at our location. The computer makes a connection to a Berlin databank, accesses the necessary information and integrates it into the running system.

As another information layer, the system also allows the integration of CAD models. Here, the area around the Memorial Church and the Kurfuerstendamm where the ART+COM offices are located. We can also enter our building. Besides allowing us to move in virtual space, the system allows us to travel through time and get access to historical information. Here we are at

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Potsdamer Platz, before the Second World War, Europe's busiest traffic junction and during the Cold War, a No Man's Land between the East and West. We can take a trip through time and see how the area has changed over the years. As well as historical film clips, the system also allows access to live cameras as windows on to reality. During the presentation in Kyoto, the system offered a live video signal from a remote controlled camera installed in the ART+COM office. Remotely controlled by the user in Kyoto, the camera can show the church clock with exactly eight hours time zone difference, nearly real time if we take the two-hundred and fifty milliseconds transmission delay into account.

In the future, we will develop T_Vision further as a multipurpose interface providing users with any kind of information and telecommunicative services which can be meaningfully organized and visualized on the virtual globe. Our goal is now to motivate people around the world to be part of this distributed system; people who will provided it with their own local information and services.