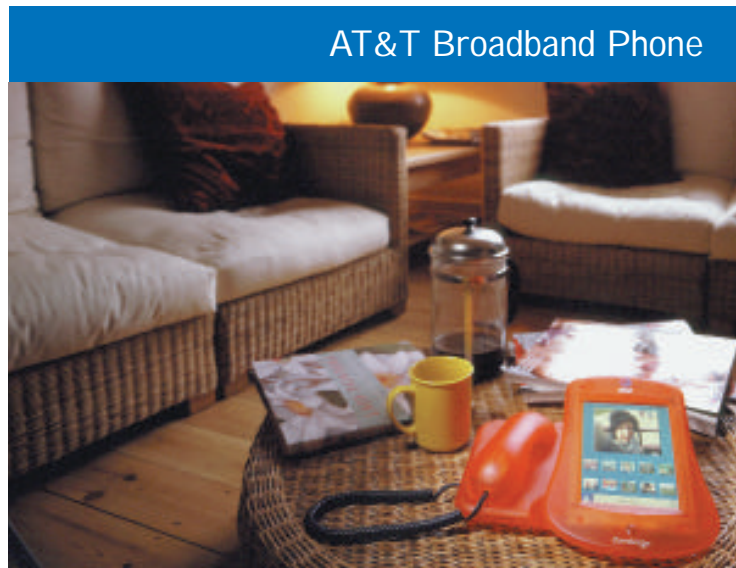**AT&T Laboratories
CAMBRIDGE**

The AT&T
Broadband Phone™

From AT&T Laboratories Cambridge

The AT&T Broadband Phone system points to the future of telephone communications in the 21st century. Through a friendly, touch-sensitive video display, users have access to an exciting range of multimedia applications and services made possible by new broadband networks.

AT&T Broadband Phone

The Broadband Phone technology has been developed at AT&T Laboratories Cambridge. It combines the simplicity, reliability and ease-of-use that we have come to expect from telephones for the past 50 years, while harnessing the power and flexibility of computers and the Internet. In particular, the Broadband Phone exploits new high-speed broadband networks that will soon become the norm for use at home or work and even on the move.

Like the conventional telephone, The Broadband Phone itself is a simple device that can do nothing unless it is attached to a network. All applications and services run elsewhere on the network making the phone cheap and robust while the potential for applications is limitless. New applications can be tailored for specific environments such as a home, office or hotel and made available instantly without any modification to the phones themselves.

Applications

AT&T has already developed illustrative applications for the Broadband Phone, some of which can be carried out while having a normal audio conversation.

- Draw maps, diagrams, doodles or play games using the shared sketchpad which is visible at either end of the call

- Send and receive faxes, voice mail or emails

- Browse the Web together

- Share stored music or photograph collections

- View video from Internet-connected cameras

- Provide local information and guides for visitors

- Shop electronically using the phone

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The Broadband Phone is just one part of the overall vision for the future of information access. The same network-centric technology could be used with handheld wireless tablets or wall-mounted panels - with service operators offering a wide range of value-added applications to these remotely managed devices.

Broadband Phone Technology

The Broadband Phone builds on three key technologies:

Thin-client technology means that the Broadband Phone is stateless and simply displays graphics from the server running the application and sends back input from pen-strokes or finger-presses. This means that a replacement phone can simply pick up where the old one left off with no loss of phone numbers or services.

High-speed, or broadband networks support the explosive growth in demand for multimedia services on the Internet from shopping electronically to playing videos. It is these fast networks that support the Broadband Phone's radical thin-client approach. The underlying broadband connection can be Ethernet, cable modem, xDSL or wireless.

Standard IP telephony means that The Broadband Phone does not need to plug into a traditional telephone line, but transmits voice in digital form over the network. IP telephony over the internet can be cheaper than traditional telephone calls, but in addition, many other types of data also can be sent at the same time.

AT&T Laboratories Cambridge

is Europe's leading systems engineering research laboratory, recognised internationally as a centre of excellence in communications, multimedia and mobile technologies. Founded in 1986 by Olivetti, the laboratory was funded jointly by Olivetti and Oracle for three years up until 1999 when it was acquired by AT&T. Located at the heart of Cambridge, England - a city that combines rich academic heritage with successful high technology businesses - AT&T Laboratories Cambridge has a close relationship with the University of Cambridge Engineering Department.

Advantages of the Broadband Phone System

The AT&T Broadband Phone and infrastructure have many advantages including:

• Reliability - There is no application software to crash, no information to lose, no risk of viruses and zero user maintenance required.

• Future proof - The Broadband Phone never needs upgrading with new storage space or processors and simply reflects whatever applications are made available on the network at any time.

• Scalability - With shared resources and centralised management, the network centric architecture scales to millions of users worldwide but is still viable for a small enterprise.

• Mobility - Simple protocols used to interact with endpoints mean that all the facilities available on the Broadband Phone can also be accessed through other devices from a PC to a callbox or even a car dashboard.

For more information, please contact

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