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Frequently Asked Questions

special report

Press Release Full Patent (PDF)

BACKGROUND AND TECHNICAL ABSTRACT

Digital Angel[™]

E-Business Security, Emergency Location and Medical Monitoring

Background

On May 13, 1997, United States Patent Number 5,629,678 was granted for a "personal tracking and recovery system," consisting of a miniature digital transceiver -implantable in humans -- with a built-in, electromechanical power supply and actuation system. These features enable the device to remain implanted and functional for years without maintenance. This transceiver sends and receives data and can be continuously tracked by Global Positioning Satellite (GPS) technology.

On December 10, 1999, Applied Digital Solutions, Inc. (ADS) acquired the patent rights to this technology, which the company refers to as "Digital Angel™." The agreement gives ADS the right to develop this unique product for all of its applications or to sublicense the development of specific applications to other entities. ADS is actively seeking joint venture partners to develop and market this technology. We expect to



produce a prototype of the device by the end of 2000. We believe the potential global market for this device - in all of its applications -- could exceed \$100 billion.

Limitations of Competing Technologies

While a number of other tracking and monitoring technologies have been patented and marketed in the past, they are all unsuitable for the widespread tracking, recovery and identification of people due to a variety of limitations, including

unwieldy size, maintenance requirements, insufficient or inconvenient power-supply and activation difficulties. For the first time in the history of location and monitoring technology, Digital Angel™ overcomes these limitations.

Basic Features and Potential Uses of Digital ™

The Digital Angel[™] transceiver can be implanted just under the skin or hidden inconspicuously on or within valuable personal belongings and priceless works of art. When implanted within the human body, the transceiver is powered electromechanically through the movement of muscles. It can be activated either by the "wearer" or by a remote monitoring facility. The device also can monitor certain biological functions of the human body - such as heart rate - and send a distress signal to a monitoring facility when it detects a medical emergency.



Although still in the early developmental stage, we believe Digital Angel[™] could have an array of beneficial potential applications: provide a tamper-proof means of locating and identifying individuals for e-business and e-commerce security; locate individuals, including children, who are lost or who have been abducted; monitor the medical conditions of at-risk patients; track and locate military, diplomatic and other essential government personnel; determine the location or the authenticity of valuable property; track the whereabouts of wilderness sports enthusiasts (mountain climbers, hikers, skiers, etc.).