

Ex. GOOG 1029

# The European Context for Assistive Technology

Proceedings of the 2nd TIDE Congress  
26-28 April 1995, Paris

Edited by

I. Placencia Porrero and  
R. Puig de la Bellacasa  
*DGXIII, CEC, Brussels*

1995

**IOS**  
Press  
  
Ohmsha

*Amsterdam, Oxford, Tokyo, Washington, DC*

© The authors mentioned in the Table of Contents.

All rights reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, without the prior written permission from the publisher.

ISBN 90 5199 220 3 (IOS Press)

ISBN 4 274 90045 2 C3050 (Ohmsha)

Library of Congress Catalogue Card Number 95-075770

*Publisher*

IOS Press  
Van Diemenstraat 94  
1013 CN Amsterdam  
Netherlands

*Distributor in the UK and Ireland*

IOS Press/Lavis Marketing  
73 Lime Walk  
Headington  
Oxford OX3 7AD  
England

*Distributor in the USA and Canada*

IOS Press, Inc.  
P.O. Box 10558  
Burke, VA 22009-0558  
USA

*Distributor in Japan*

Ohmsha, Ltd.  
3-1 Kanda Nishiki - Cho  
Chiyoda - Ku  
Tokyo 101  
Japan

LEGAL NOTICE

The publisher is not responsible for the use which might be made of the following information.

PRINTED IN THE NETHERLANDS

## Isaac – A Personal Digital Assistant for the Differently Abled

Bodil Jönsson and Arne Svensk,  
Center of Rehabilitation Engineering, Box 118, S-221 00 Lund, Sweden  
e-mail: Bodil.Jonsson@certec.lth.se

**Abstract.** Designed to be used as an aid for individuals with cognitive dysfunctions, Isaac combines in one unit a pen-based computer, a digital camera, a GPS satellite navigation receiver, and cellular phone channels for both voice and data. This paper deals with Isaac as an experimental product, the arrangement and procedure of the ongoing user test and its results so far, and the challenging questions and ideas raised by the mere existence of Isaac.

### 1. Introduction

The aim of the Isaac project is to increase the independence of differently abled persons by enabling them to do more on their own and to decide themselves when they want to use the option of interacting with their relatives or the staff. A secondary purpose of the Isaac project is to find out how advanced technology affects daily routines and influences organizational structure.

The project has grown out of an existing cooperation between group homes in Lund for adults with cognitive dysfunctions and CERTEC, the Center for Rehabilitation Engineering at Lund University. Since September 1994, when the initial technical phase was completed, there has been a systematic search for different kinds of user experiences.



*Fig 1. Isaac is based on Sharp's version of Apples Newton with a CCD camera and phone handset integrated in a modified cover.*

### 2. Isaac - an

Isaac combines satellite navigation data. The hardware when a view greyscale image support center and later pri

A receiver coordinates retrieved by function can

Sequence navigating doing the m

The user greyscale in pictures, av shown on th is automatic contains th

A number center prov and other k



## 2. Isaac - an experimental product

Isaac combines in one unit a pen-based computer, a digital camera, a GPS satellite navigation receiver, and cellular phone channels for both voice and data. The handheld unit contains a miniature still camera. A picture is taken when a viewer window on the screen is touched, and a moment later a greyscale image appears. The picture can be immediately transmitted to the support center or just stored to be included in the personal picture data base and later printed on paper with photorealistic quality.

A receiver for the GPS satellite navigation system provides accurate coordinates in most outdoor locations. The latest position is stored and can be retrieved by the support center at any time. When privacy is preferred, this function can easily be disabled by the Isaac user.

Sequences of images on the screen can be used to guide the user in navigating on a walk, performing a repetitive task at work, cooking a meal, or doing the morning ritual properly.

The user operates Isaac through an LCD touch screen capable of showing greyscale images with reasonable quality. Interaction is based on symbols and pictures, avoiding text according to the user needs. The telephone directory is shown on the screen as faces instead of names and phone numbers. Dialling is automatic after touching the appropriate picture, and the back of the screen contains the handset.

A number of such mobile units can be in wireless contact with a support center providing assistance over the phone based on pictures, position data and other kinds of information managed by the system.



Fig 2. A wealth of capabilities

# Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

## Real-Time Litigation Alerts



Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

## Advanced Docket Research



With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

## Analytics At Your Fingertips



Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

## API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

## LAW FIRMS

Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

## FINANCIAL INSTITUTIONS

Litigation and bankruptcy checks for companies and debtors.

## E-DISCOVERY AND LEGAL VENDORS

Sync your system to PACER to automate legal marketing.