$12-million worth of computer display devices to the Saudi Arabians.

Selling Japan on Japanese

IBM's CANADIAN research laboratory in Toronto, Ontario, helped to develop a computer terminal which reads both Japanese and Chinese ideograms.

After a three-year development program, Canada is exporting to Japan a terminal with 254 keys and 12 shift keys which give access to 2,500 common characters written in either "Hiragana" or "Kanji." Representing 80 per cent of written Japanese, the Hiragana presents basic symbols of spoken Japanese which when combined with the ideographic Kanji characters form sentences.

A further 9,000 characters are available using an alternate decimal call-up system. However, even with a keyboard that looks as if it were designed by a crazed crossword-puzzle fanatic, designers haven't scratched the surface of the complexity of Japanese. There are an estimated 50,000 characters which can be used, so for each character above the 11,500 which are readily available, a Japanese typist must look up in a computer dictionary a special two- or three-step retrieval code.

Managing Forests with Forcyte

A CANADIAN researcher is putting together a computer program that will help foresters to manage forests to their best advantage.

The program being developed by Hamish Kimmins of the University of British Columbia will simulate the reppeated life cycles of a forest, tracing the crucial flow of nutrients between soil and tree, and air and water.

It has already demostrated that a forest can slip over the edge and too much management will diminish the harvest. To be added to the program are cost factors that will tell forest managers how much to invest in silviculture.

The computer model, called Forcyte, can be adapted to fit any planted forest. Users need only basic tree chemistry measurements and tree growth tables, which have already been compiled for most commercial stands. Then they can forecast forest trends for up to 500 years.

International Exposure for Telidon Technology

NORTH AMERICA has passed a major milestone in electronic publishing standards with the achievement of compatible standards between Canada's Telidon, the Columbia Broadcasting System (CBS) and the American Telephone and Telegraph Company (ATandT).

As a result, consumers all over North America will have access to a vast array of electronic publishing and other services from anywhere in Canada and the United States with the same home set or office equipment.

This achievement is the culmination of several years of efforts by Canadian, U.S. and foreign technical experts in research and development laboratories, international standards organizations, the Canadian Videotex Consultative Committee, and the U.S. Electronics Industry Association.

Canada's Department of Communications will soon issue a provisional broadcast specification incorporating these recent developments as one of the final steps to formally adopting a Canadian broadcast teletext standard. And, it is understood that CBS will update their filing with the Federal Communications Commission (FCC) to reflect these most recent developments to achieve compatibility.

All of Telidon's present capabilities, as well as demonstrated enhancements, can now be made available to the entire marketplace in standard videotex and teletext products and Canadian industry is already taking steps to implement these new developments in all of their products and services. At least 20 Canadian companies are actively producing Telidon products and services and will be well placed to capture a significant share of the North American market.

Meanwhile, Norpak Ltd., the privately-owned Canadian company that originally developed Telidon in conjunction with the Canadian Department of Communications, has entered into an agreement with Apple Canada Inc. Apple, a public corporation with headquarters in California, is a leader in the worldwide personal computer market.

Under the agreement, Norpak will design and manufacture a Telidon interface card for the Apple II and Apple III personal computers. With this card Apple users will be able to directly access Telidon information banks for an increasing range of applications, such as electronic mail and shopping, ticket reservations, educational courses, reference materials, statistical data, and interactive games.

According to the manufacturers, the graphics generation and software on both the Apple II and the Apple III make these computers particularly suitable to the Telidon technology and, through this agreement, the best personal computer is being combined with the best videotex service. With more than 200,000 Apple II personal computers throughout the world, Telidon technology has the opportunity of gaining maximum international exposure.

An Apple II or Apple III user will simply purchase the Telidon interface card at a reasonable cost, plug it into one of the computers expansion slots, and be able to receive via standard telephone or data lines any information in the Telidon format. If desired, the user can store this information and edit or complement it through the computer.

More recently, Norpak and a neighbouring Ottawa area firm, Hempton Corporation, jointly entered into another agreement much further afield — in Australia. The Consolidated Electronic Industries group of Melbourne — one of the major suppliers to the Australian telephone network, Telecom — has agreed to manufacture Telidon terminals.

Norpak will supply the Australian company with $2-million worth of components over the next three years. Hempton Corp., manufacturers of equipment suitable for the display of electronic information in business and in Telidon applications and one of the major creators of frames of information for the Telidon network, will supply $1-million worth. These sales vastly improve the possibilities of the Telidon system becoming standardized in Australia.

Both Norpak and Hempton went to West Germany in June to arrange similar agreements and are hoping also to break into the market in Switzerland, Austria, and Belgium.

A strong vote of confidence for Canada's Telidon technology came from the large Canadian corporation, Noranda, last month. The company announced that its was investing $30 million through its wholly-owned subsidiary MacLaren Power and Paper Ltd. in Norpak Ltd. The money is to be used, on top of the commitment already made by MacLaren in Norpak, for the further development and production of display systems and in particular Telidon.