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Because of a mandate to our office by the U.S. Congress through the Japanese Technical Literature Act of 1986 to improve the use of Japanese scientific and engineering literature by U.S. researchers, industries, and businesses, and because the language barrier has been considered by many as one of the largest obstacles to achieving this goal, our Office is very much interested in expediting Japanese to English translation. If machine translation could lead to the promised land faster and more economically than the current manual, expensive and time consuming situation, we would be very enthusiastic. Although machine translation research started in the United States during the early sixties, U.S. Government support for it has been limited, mostly because of the negative impact made by the famous ALPAC report of the National Academy of Science, the exception being the Russian-English project conducted under NASA and U.S. Air Force. Recent interest in Japanese technology, stimulated primarily by the industrial competitiveness issue associated with the trade imbalance problems, rejuvenated machine translation research for the Japanese to English system in the U.S. Air Force and the intelligence communities resulted in support to enhance the Japanese Systran system. Although there are some related activities at several universities, U.S. efforts on Japanese-English machine translation are much smaller than those supported vigorously by the Japanese Government and industries, the partial accomplishment of which has been presented and exhibited at the Hakone machine translation conference. Although quite impressive, the Japanese com-

mercial Japanese-English machine translation systems shown at the conference are not immediately useful for the average U.S. engineers and scientists who are primarily interested in finding the technical content of printed Japanese documents, be it academic and/or trade journals, company brochures, patents, and news releases, because most of them are unable to input the Japanese text into the machine translation system through keyboard. What is desperately needed is an OCR capability for them to input Japanese text without human keyboard operators, in a similar manner that the FAX machine is used nowadays. Although OCR of Japanese text is an established technology as appearing in some publications and I was told this by Prof. Nagao, I was disappointed that no exhibit nor presentation was made with regard to coupling commercial OCR to machine translation during this conference. Since there are no activities in the U.S. to develop OCR for Japanese text, our office is looking forward to Japanese commercialization of OCR coupled Japanese-English machine translation systems, which will be reasonably accurate so that an expert well familiar in the specific field of the subject translation can grasp its technical content, despite grammatical and/or idiomatic errors. One thing essential for such system, however, is a comprehensive technical term dictionary in specific disciplines, such as electrical and mechanical engineering, material sciences, biotechnology, computer sciences, medical engineering, etc. Post editing English word processing capability would also be desirable.