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(21) International Application Number: PCT/US97/21530 (22) International Filing Date: 21 November 1997 (21.11.97) (30) Priority Data: 08/758,663 2 December 1996 (02.12.96) US (71) Applicant: MICROSOFT CORPORATION [US/US]; One Microsoft Way, Redmond, WA 98052-6399 (US). (72) Inventors: WONG, Peter, Kam-Ho; 3415 80th Avenue S.E., Mercer Island, WA 98040 (US). WITT, Jeffrey, M.; 133 146th Avenue S.E., Bellevue, WA 98007 (US). (74) Agents: PIRIO, Maurice, J. et al.; Seed and Berry LLP, 6300 Columbia Center, 701 Fifth Avenue, Seattle, WA 98104-7092 (US).		(81) Designated States: CN, IL, JP, KR, SG, European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE). Published <i>With international search report.</i> <i>With amended claims.</i> (88) Date of publication of the international search report: 23 September 1999 (23.09.99) Date of publication of the amended claims: 28 October 1999 (28.10.99)

(54) Title: **METHOD AND SYSTEM FOR AUDIBLY OUTPUTTING MULTI-BYTE CHARACTERS TO A VISUALLY-IMPAIRED USER**

(57) Abstract

An improved audible-output system is provided that disambiguates the phonetic sounds of multi-byte characters so that a visually-impaired user can uniquely identify which characters are associated with the output. The improved audible-output system provides this disambiguation through the use of a secondary audio channel that simultaneously outputs one or more sounds that distinguishes a character being output on a primary audio channel. That is, the phonetics of a character are audibly output on the primary channel, and the distinguishing sound is simultaneously output on a secondary channel. The combination of the two sounds on the two channels unambiguously identifies the character being output to the listener. In effect, this system brings the distinctness of shape to a visually-impaired listener and reinforces the differences in meaning between similar-sounding characters to the listener.

