US007184032B2

(12) **United States Patent**
Stohrer et al.

(10) **Patent No.: US 7,184,032 B2**
(45) **Date of Patent: Feb. 27, 2007**

(54) **TACTILE OVERLAYS FOR SCREENS**

(75) Inventors: **Charles W. Stohrer**, Rochester, NY (US); **Murray O. Meetze, Jr.**, Rochester, NY (US); **Dennis C. DeYoung**, Webster, NY (US)

(73) Assignee: **Xerox Corporation**, Stamford, CT (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 87 days.

(21) Appl. No.: **10/939,895**

(22) Filed: **Sep. 13, 2004**

(65) **Prior Publication Data**

US 2005/0030296 A1 Feb. 10, 2005

Related U.S. Application Data

(62) Division of application No. 10/113,105, filed on Mar. 29, 2002, now Pat. No. 6,864,878.

(51) **Int. Cl.**
G06K 15/00 (2006.01)

(52) **U.S. Cl.** **345/173**; 345/23; 345/156; 345/214; 178/18.11; 341/23; 348/564; 463/31

(58) **Field of Classification Search** 345/23, 345/156, 168, 172, 173, 214; 178/18.11; 341/22, 23; 348/564; 463/31
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

98,803 A * 1/1870 Gourgey et al. 76/78.1
184,574 A * 11/1876 Phillips et al. 280/137.501
4,799,083 A * 1/1989 Knodt 40/518
5,059,960 A * 10/1991 Rosenberg et al. 345/174
5,821,512 A * 10/1998 O'Hagan et al. 235/383
5,909,211 A * 6/1999 Combs et al. 345/172
6,059,575 A * 5/2000 Murphy 434/112
6,259,044 B1 * 7/2001 Paratore et al. ..... 200/5 A
6,278,441 B1 * 8/2001 Gouzman et al. 345/163
6,356,210 B1 * 3/2002 Ellis 340/990
6,357,940 B1 * 3/2002 Murphy 400/483
6,459,364 B2 * 10/2002 Gupta 340/407.1
6,469,712 B1 * 10/2002 Hilpert et al. 715/727
6,636,203 B1 * 10/2003 Wong et al. 345/173
6,704,133 B2 * 3/2004 Gates et al. 359/296
2002/0036617 A1 * 3/2002 Pryor 345/156
2002/0140714 A1 * 10/2002 Hoffman 345/700
2002/0177877 A1 * 11/2002 Choy 607/1

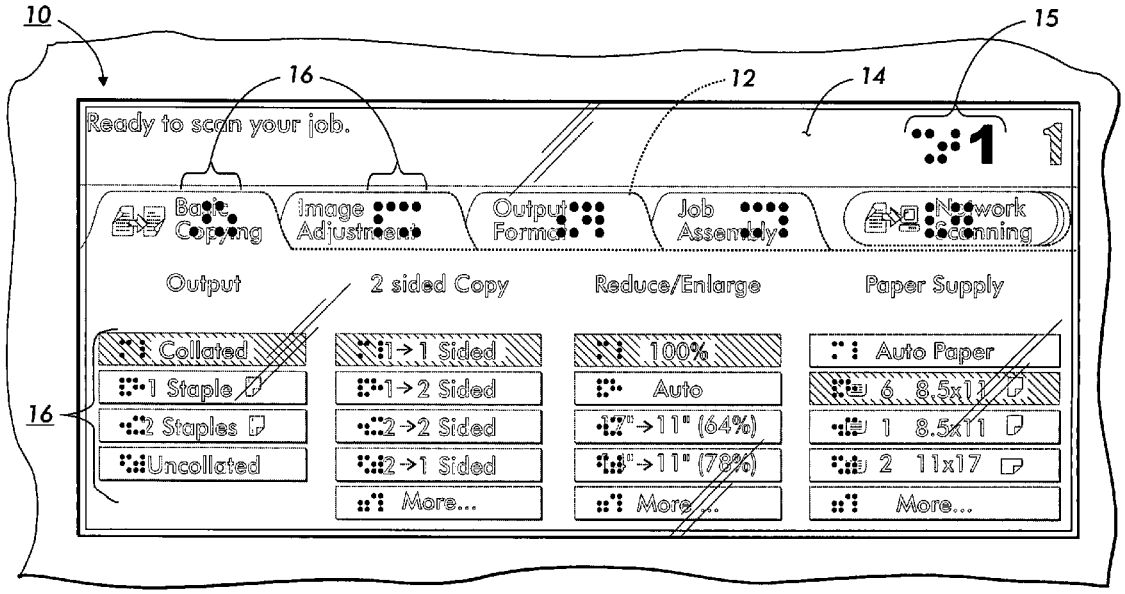
OTHER PUBLICATIONS

Braille touch scren overlay of thin transparent film with tactile information on LCD button being pressed Derwent Acc No. 2001-519583; Pub No. 441011; Pub. Date Jan. 10, 2001.*

* cited by examiner

Primary Examiner—Bipin Shalwala
Assistant Examiner—Vincent E. Kovalick
(74) *Attorney, Agent, or Firm*—Joseph M. Young

(57) **ABSTRACT**

An overlay for use with a display screen, comprising at least one first tactilely readable area, wherein the display screen includes a first feature thereon, wherein the tactilely readable area includes information in a tactilely readable format, and wherein the information identifies a first feature displayed on the screen.

16 Claims, 10 Drawing Sheets