

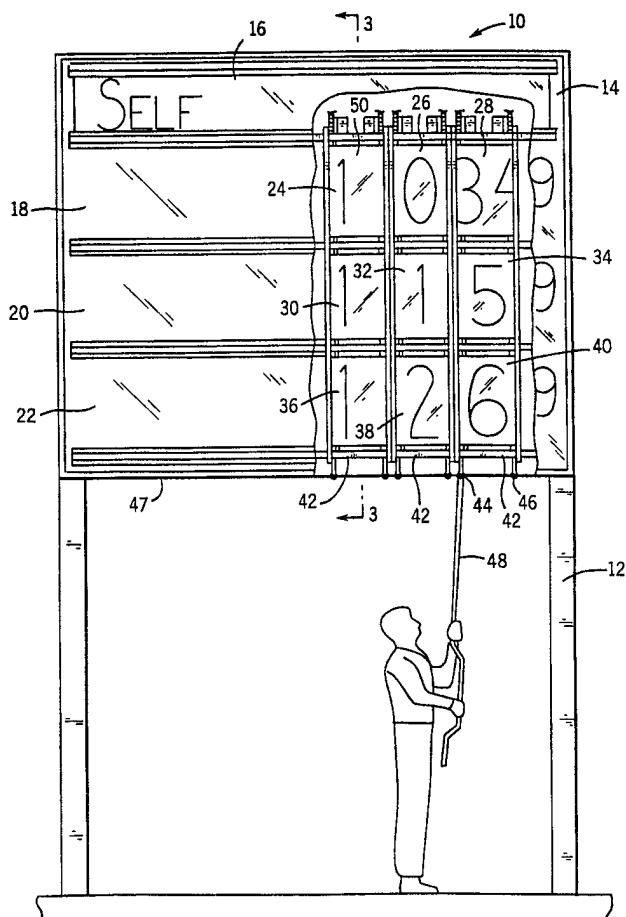


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(21) International Application Number: PCT/US98/09647 (22) International Filing Date: 11 May 1998 (11.05.98) (30) Priority Data: 08/853,216 9 May 1997 (09.05.97) US (71) Applicant: MILWAUKEE SIGN CO., INC. [US/US]; 1964 Wisconsin Avenue, Grafton, WI 53024 (US). (72) Inventors: AIKEN, Robert, B.; 10709 Gazebo Hill Parkway East, Mequon, WI 53092 (US). CLAPPER, Robert, C.; 1216 Lakefield Road, Grafton, WI 53024 (US). (74) Agents: FETTERLEY, Daniel, D. et al.; Andrus, Scales, Starke & Sawall, LLP, Suite 1100, 100 East Wisconsin Avenue, Milwaukee, WI 53202 (US).		(81) Designated States: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, GW, HU, ID, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG). Published <i>With international search report.</i> <i>Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.</i> (88) Date of publication of the international search report: 25 March 1999 (25.03.99)

(54) Title: SCROLLING SIGN WITH MANUALLY OPERATED CHANGE MECHANISM**(57) Abstract**

A scrolling sign (10) that includes a plurality of webs (50) each having indicia (24, 26, 28) which are displayed through a window on the sign face (14). The plurality of webs (50) are disposed in vertical and horizontal alignment with one another. Each of the webs (50) are disposed in between a forward and a reverse web roll (52, 54). A plurality of forward and reverse web rolls (52, 54) are rotatably mounted to a modular unit (56) such that the individual web rolls (52, 54) are aligned. A drive shaft (68, 72) passes through each of the web rolls (52, 54) and is engageable with only one of the web rolls (52, 54) at a time. The engagement of the drive shaft (68, 72) with the web rolls (52, 54), as well as rotation of the individual web rolls (52, 54) is manual. The drive shaft (68, 72) includes a driving mechanism (82) which prevents the drive shaft (68, 72) from being rotated in an improper direction.



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INTERNATIONAL SEARCH REPORT

International application No.
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A. CLASSIFICATION OF SUBJECT MATTER

IPC(6) :G09F 11/18

US CL :40/519,522

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 40/519,522,518,523

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

None

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

None

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 1,009,543 A (MEHLHORN) 21 NOVEMBER 1911 (21/11/11), see figures 1 and 2.	1, 5, 7, 8, 11, 12, 14, 23, and 24
A	US 1,872,145 A (HURFORD) 16 AUGUST 1932 (16/08/32), see figure 1.	1, 9, 10, 14, 23
A	US 5,412,893 A (AIKEN, SR.) 09 MAY 1995 (09/05/95), see figures 1 and 2.	1, 9, 10, 14, 23

☐ Further documents are listed in the continuation of Box C. ☐ See patent family annex.

* Special categories of cited documents:	*T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
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Name and mailing address of the ISA/US
Commissioner of Patents and Trademarks
Box PCT
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Facsimile No. (703) 305-3230

Authorized officer

BRIAN K. GREEN

Telephone No. (703) 308-2168