



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

(10) **Patent No.:** **US 9,411,370 B2**
(45) **Date of Patent:** **Aug. 9, 2016**

(54) **HUMAN-MACHINE DIALOG SYSTEM**

(56) **References Cited**

(71) Applicant: **Schneider Electric Industries SAS**,
Rueil Malmaison (FR)

U.S. PATENT DOCUMENTS

(72) Inventors: **Dominique Benni**, Mornac (FR);
Francis Chauvet, Mouthiers (FR);
Alain Guillot, Fleac (FR)

3,562,468 A * 2/1971 Stefani H02G 3/12
174/53
5,036,168 A * 7/1991 Kikuchi H01H 23/025
174/53
5,943,507 A * 8/1999 Cornish G06F 13/24
710/260
6,140,593 A * 10/2000 Bramesfeld H10H 13/70
200/341

(73) Assignee: **SCHNEIDER ELECTRIC**
INDUSTRIES SAS, Rueil Malmaison
(FR)

(Continued)

(*) Notice: Subject to any disclaimer, the term of this
patent is extended or adjusted under 35
U.S.C. 154(b) by 394 days.

FOREIGN PATENT DOCUMENTS

DE 198 39 811 A1 3/2000
DE 103 04 595 B3 10/2004

(Continued)

(21) Appl. No.: **14/160,832**

OTHER PUBLICATIONS

(22) Filed: **Jan. 22, 2014**

French Preliminary Search Report issued Sep. 25, 2013, in French
Application No. 13 52582 filed Mar. 22, 2013 (with Written Opinion
and English Translation of Categories of Cited Documents.

(65) **Prior Publication Data**

US 2014/0289438 A1 Sep. 25, 2014

Primary Examiner — Elias Mamo

(30) **Foreign Application Priority Data**

Mar. 22, 2013 (FR) 13 52582

(74) *Attorney, Agent, or Firm* — Oblon, McClelland, Maier
& Neustadt, L.L.P.

(51) **Int. Cl.**

G06F 3/00 (2006.01)
G06F 1/16 (2006.01)
G06F 3/02 (2006.01)
H03K 17/972 (2006.01)
G06F 13/40 (2006.01)

(57) **ABSTRACT**

The invention concerns a human-machine dialog system (1)
comprising:

(52) **U.S. Cl.**

CPC **G06F 1/1632** (2013.01); **G06F 3/0202**
(2013.01); **G06F 13/4068** (2013.01); **H03K**
17/972 (2013.01); **H01H 2229/022** (2013.01);
H01H 2300/032 (2013.01); **Y02B 90/224**
(2013.01); **Y04S 20/14** (2013.01)

a support (3) having a plurality of identical docking sta-
tions (30), each docking station (30) being associated
with a universal human-machine dialog device (4), each
universal human-machine dialog device (4) comprising
at least a display member (41) and a sensor member (40),
a plurality of modular members (2), each modular member
(2) being arranged to be positioned in a docking station
(30) in a removable and interchangeable manner and
comprising a human-machine dialog interface (20)
arranged to cooperate with said display member (41)
and/or said sensor member (40).

(58) **Field of Classification Search**

None
See application file for complete search history.

16 Claims, 3 Drawing Sheets

