US005367626A

United States Patent [19]

Morioka et al.

[11] Patent Number: 5,367,626

[45] Date of Patent: Nov. 22, 1994

[54] AUTOMATIC ICON GENERATION SYSTEM

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[21] Appl. No.: **181,874**

[22] Filed: **Jan. 13, 1994**

Related U.S. Application Data

[63] Continuation of Ser. No. 610,586, Nov. 8, 1990, abandoned.

[30] **Foreign Application Priority Data**

Nov. 8, 1989 [JP] Japan 1-288758

[51] **Int. Cl.**[5] **C06F 15/62**

[52] **U.S. Cl.** **395/159**; 395/156

[58] **Field of Search** 395/155–161, 395/154, 135; 340/700; 345/133, 145–146, 115

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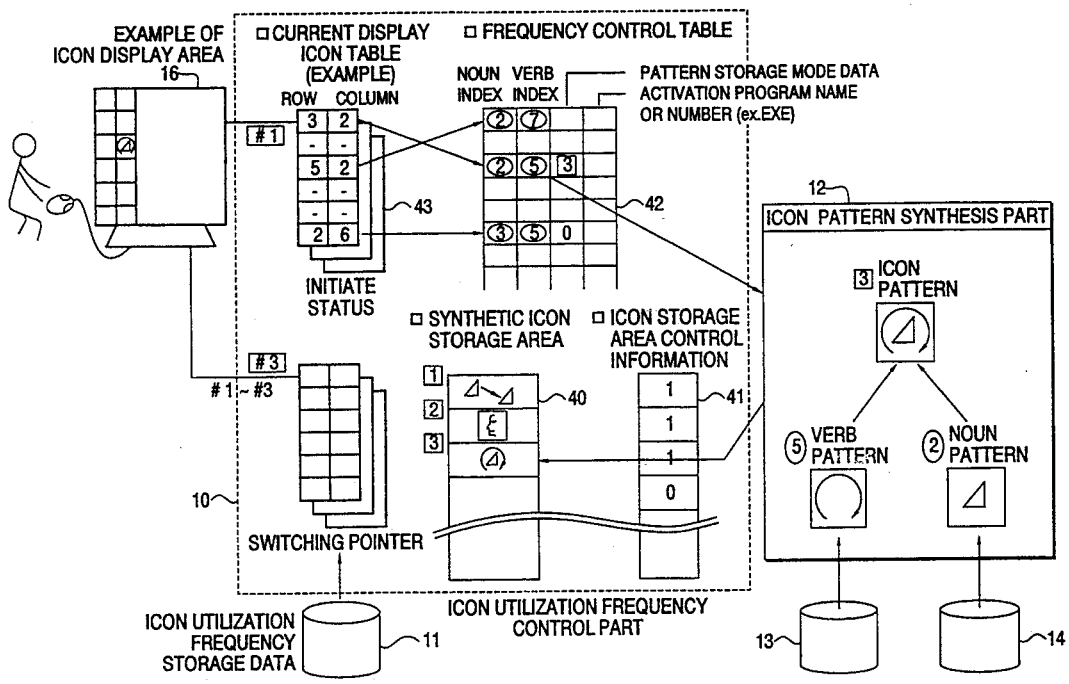
[57] **ABSTRACT**

To improve user-friendliness, icons selectable by a user are automatically generated by synthesizing more basic graphics. The system for displaying icons according to utilization frequency and to comprehensively express the computer's various modes. An icon pattern memory stores a plurality of graphic elements representing icon patterns which can be combined to generate the icons used in the computer. An icon pattern synthesizer synthesizing icon patterns in the icon pattern memory to generate the icons. An icon utilization controller controls the icon synthesis by the icon pattern synthesizer according to the user's input and monitors the utilization of all icons that can be synthesized by the icon synthesizer. A display controller controls display of a plurality of icons on the display screen of the computer according to the icon utilization, under the control of the icon utilization controller.

10 Claims, 24 Drawing Sheets