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Shimada et al.

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(45) **Date of Patent:** **Sep. 7, 2004**

(54) **DATA CONVERSION METHOD AND APPARATUS**

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(73) Assignee: **Hitachi, Ltd.** (JP)

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(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

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(21) Appl. No.: **08/878,259**

(22) Filed: **Jun. 18, 1997**

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Related U.S. Application Data

Primary Examiner—Chris Grant

(63) Continuation-in-part of application No. 08/633,311, filed on Apr. 15, 1996.

(74) *Attorney, Agent, or Firm*—Sofer & Haroun, LLP

(30) **Foreign Application Priority Data**

(57) **ABSTRACT**

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Jul. 18, 1995	(JP)	7-181550
Jun. 20, 1996	(JP)	8-159487

A data conversion apparatus included an information input device, a holder for holding information designating a method of the conversion processing from input portion when the kind of the input information is examined and is judged as predetermined data for executing a data conversion processing, a convertor for executing the data in accordance with a predetermined rule, a synthesizer for generating new data by combining the input information with a predetermined data content, and an information output device for outputting the new data so generated. When the kind of the data is screen configuration data describing configuration of the screen output of an information processing unit, the predetermined rule adds a display area of the screen configuration and converts it to a screen configuration data capable of displaying a plurality of screen configurations on the same screen.

(51) **Int. Cl.**⁷ **H04N 7/173**

(52) **U.S. Cl.** **725/119; 725/95; 725/105; 725/37; 709/246**

(58) **Field of Search** **725/119, 118, 725/120, 114, 116, 91, 93, 97, 98, 105, 121, 95; 709/219, 203, 206, 207, 246; H04N 7/16, 7/173**

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23 Claims, 39 Drawing Sheets

STRUCTURAL EXAMPLE OF THIS INVENTION

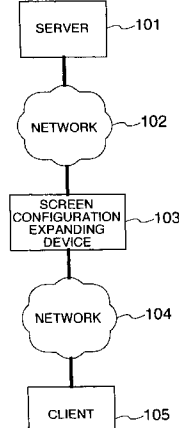


FIG. 1

STRUCTURAL EXAMPLE
OF THIS INVENTION

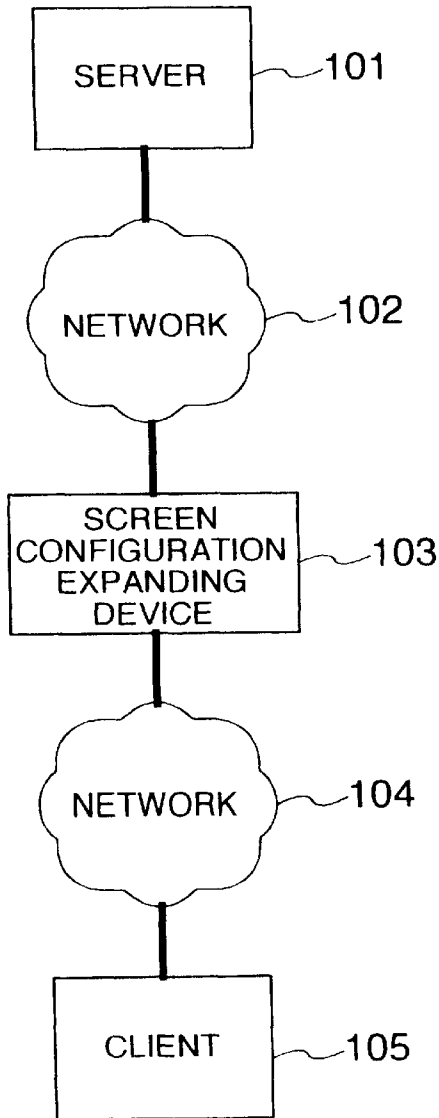


FIG. 4

STRUCTURAL EXAMPLE
OF THIS INVENTION

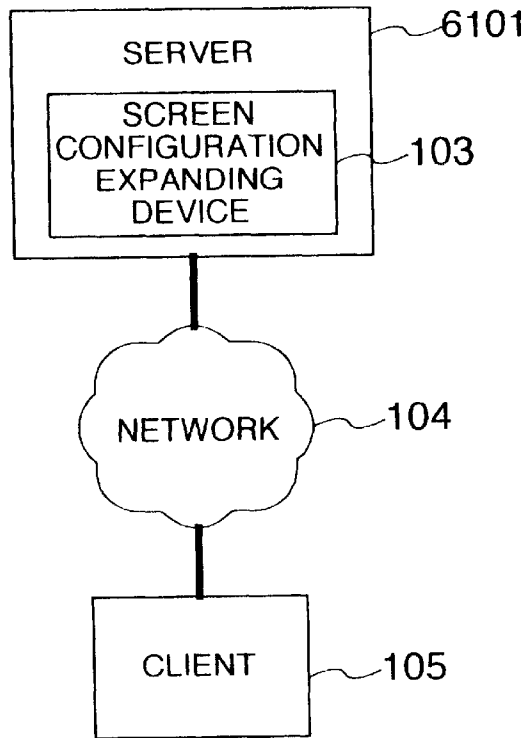


FIG. 2

EXAMPLE OF CONSTRUCTION OF SCREEN CONFIGURATION EXPANDING DEVICE

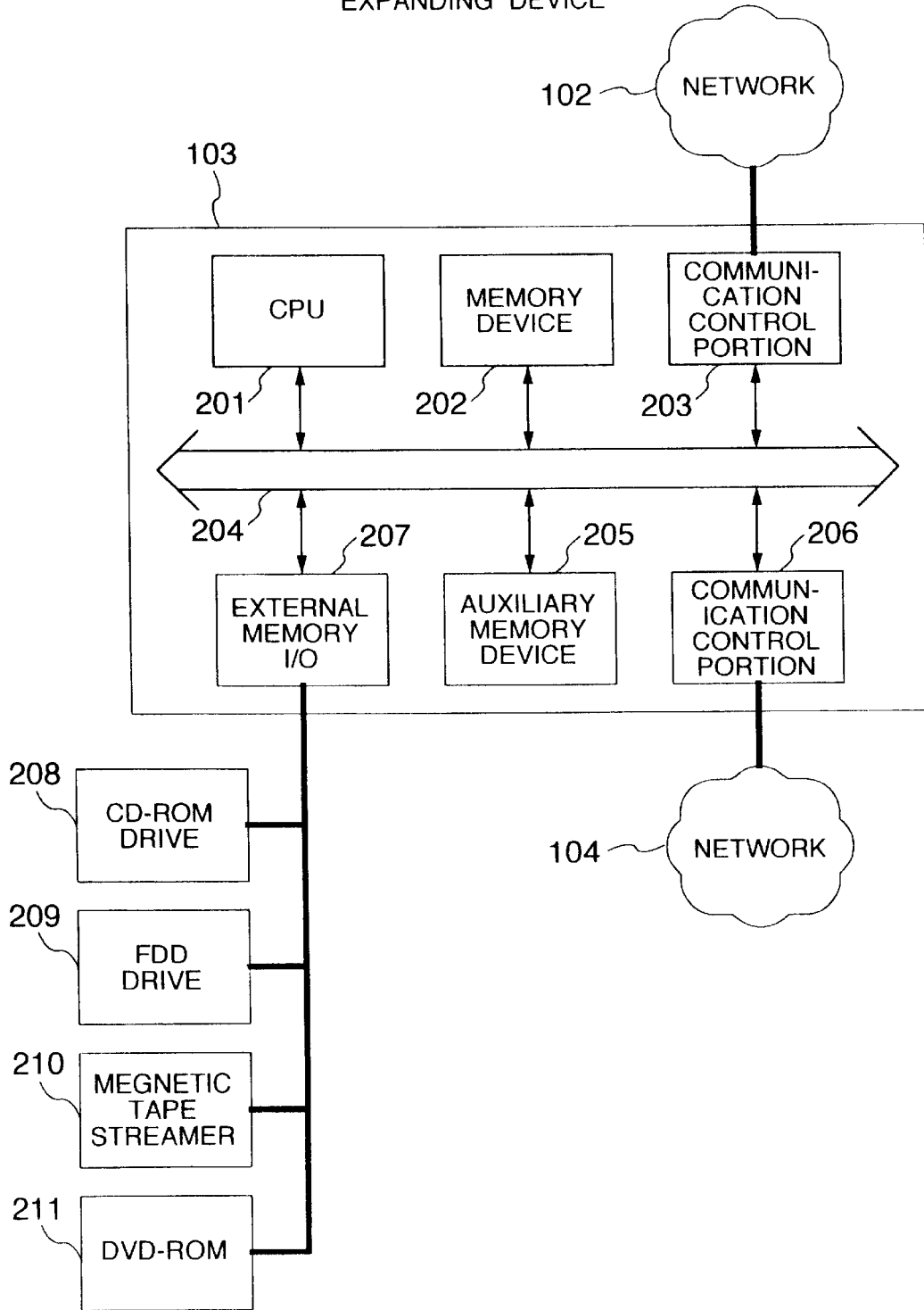


FIG. 3
EXAMPLE OF FUNCTIONAL BLOCK OF
SCREEN CONFIGURATION EXPANDING DEVICE

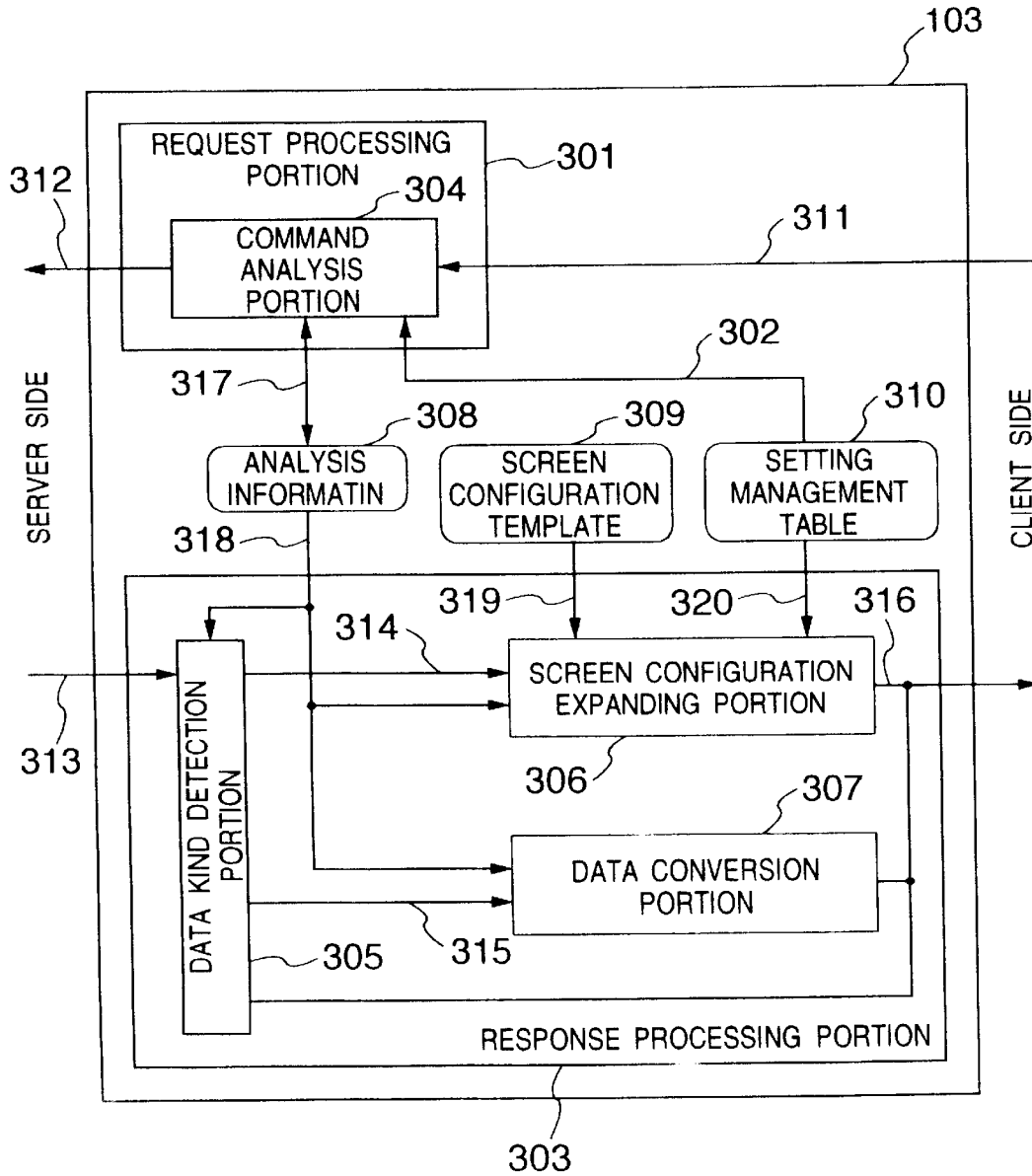
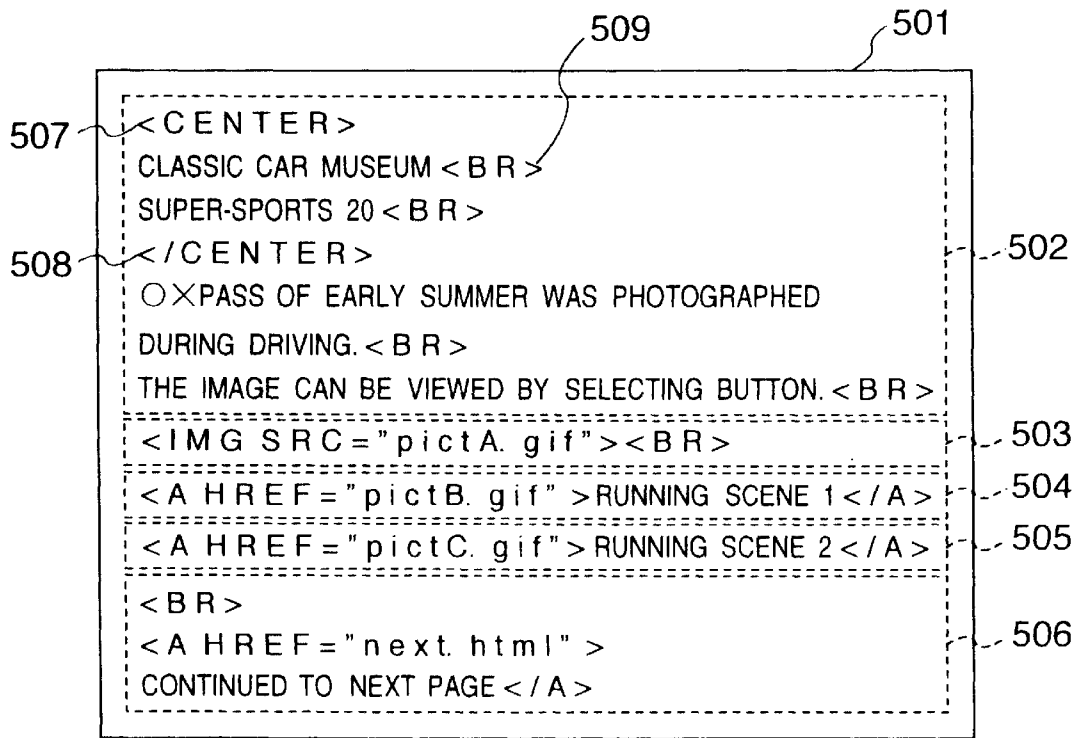


FIG. 5
EXAMPLE OF SCREEN CONFIGURATION DATA



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