受験番号:16IPE020

問1.

1. A communication classification device for classifying communication over an IP network, the communication classification device comprising:

an acquiring unit configured to acquire pieces of header information of packets constituting a communication;

an analyzing unit configured to obtain some of the pieces of header information acquired by the acquiring unit or a set of more than one of the pieces of header information;

a determining unit configured to compare some of the pieces of header information or the set of more than one of the pieces of header information obtained by the analyzing unit with external data to determine which of attribute values indicating "an end host," "a server," or "unknown" each of a transmitting host and a receiving host of the communication corresponds to; and

a classifying unit configured to classify the communication as an end-host to end-host communication or a communication other than an end-host to end-host communication on the basis of the attribute values determined by the determining unit.

2. The communication classification device according to claim 1, wherein when both of the attribute value of the transmitting host and that of the receiving host correspond to "end hosts," the classifying unit classifies the communication as the end-host to end-host communication; otherwise, the classifying unit classifies the communication as the communication other than the end-host to end-host communication, or

when both of the attribute value of the transmitting host and that of the receiving host correspond to "end hosts" or when one of the attribute values corresponds to "and end host" and the other corresponds to "unknown," the classifying unit classifies the communication as the end-host to end-host communication; otherwise, the classifying unit classifies the communication as the communication other than the end-host to end-host communication.

問2.

The present invention generally relates to a motor for a drive unit for driving an automobile part in cooperation with another automobile part.

This type of motor includes a stator having a stator housing, a drive shaft rotatable about the stator, a rotor attached to the drive shaft and having at least one rotor winding, and a rectifier. In such a motor, a brush attached to the stator housing has to be in contact with the rectifier and allow the rectifier to slide on the brush. The brush is attached to the stator housing so as to be pressed against the rectifier by means of an elastic member such as a spring. This structure for allowing the brush to be pressed against the rectifier by the elastic member, however, makes assembly of the motor difficult. This is because the brush needs to be moved in the radial direction against the elastic force of the elastic member so as to insert the rectifier into the brush in assembly.

問3.

Fig. 1 is a block diagram of a nonvolatile memory device 100 according to an embodiment of the present invention.

As illustrated in Fig. 1, the nonvolatile memory device 100 includes a cell array 110, a decoder 120, a page buffer 130, a control logic circuit 140, and a dummy bit line bias circuit 150. The cell array 110 can include a plurality of memory blocks. One memory block is illustrated as an example in Fig. 1.

One memory block includes a plurality of memory units. Each memory unit includes a memory string in which a plurality of memory cells is connected in series, and select transistors connected to both ends of the memory string. Control gates of the memory cells are connected to word lines WL0 to WL31, and control gates of the select transistors are connected to select gate lines GSL, SSL.

Each of the memory blocks can include a plurality of pages. One page 115 is formed along one word line WL and includes a plurality of memory cells. In the nonvolatile memory device 100, erase operation can be performed on a memory block by memory block basis. Write operation and read operation are performed on a page by page basis.

The cell array 110 can include dummy cells. The dummy cells are connected to dummy cell lines DBL0, DBL1, and DBL2. The dummy cells do not have stored therein valid data.