

## United States Patent [19]

Collins, III et al.

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### [54] SYSTEM FOR SOFTWARE DISTRIBUTION IN A DIGITAL COMPUTER NETWORK

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[22] Filed: Sep. 30, 1996

### Related U.S. Application Data

[63]	Continuation of Se	r. No. 194,925, Feb. 14, 1994, abandoned.
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[51] **Int. Cl.**<sup>6</sup> ...... **G06F 15/177**; G06F 9/445 

395/712; 395/653 395/200.52, 200.32, 200.56, 712, 651, 652,

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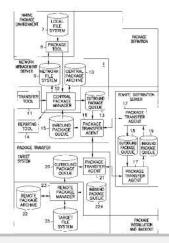
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#### ABSTRACT [57]

A process of distributing software and data in a digital computer network by combining the software and data, together with programs and data known as methods, into single entities referred to as Packages, and then by using specific techniques to transmit Packages from one computer to another. The methods are operable on a Target digital computer to unpack and perform useful functions such as installing and backing out software on the Target digital computer, collecting data from the Target digital computer and forwarding it to another digital computer, or completing a system administration function on the Target digital computer. The techniques used in transmitting Packages between digital computers includes use of Agent software to transfer and activate Packages at appropriate times. The techniques also include forwarding multiple copies of Packages received on a slow network connection to one or more digital computers connected on faster network connections. The techniques also include temporarily storing one or more Packages for later transmission to computers which connect occasionally to the network. Further, the techniques include limiting simultaneous transfers to Target digital computers based on network capacity and topology. The techniques also including limiting the type of software and data which each Package may affect on a Target digital computer, to more easily manage which Packages must be backed out in what order from the Target digital computers. Finally, the techniques also include constructing Packages which contain some software and data which depends on the configuration of the Target digital computer, and transferring only that part of the Package which is appropriate for each Target digital computer's configuration.

### 28 Claims, 8 Drawing Sheets





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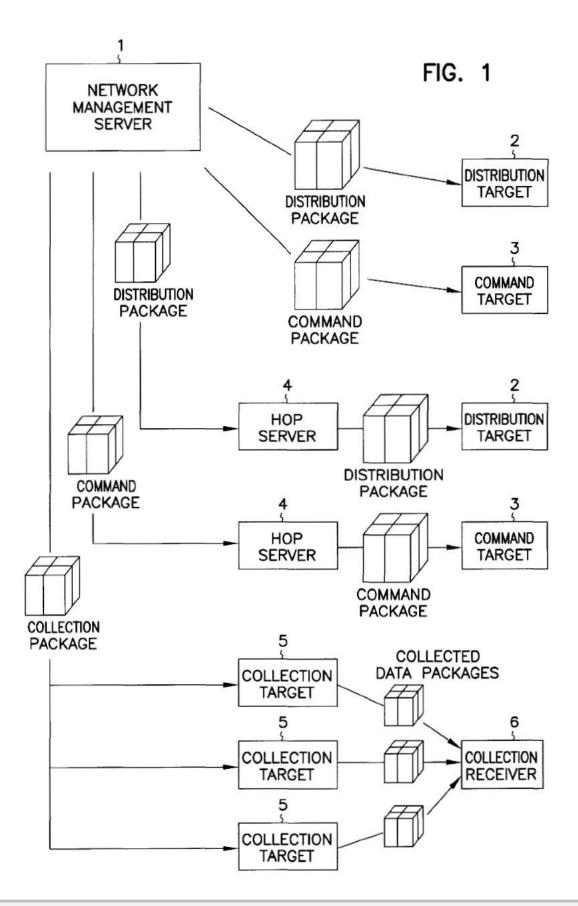
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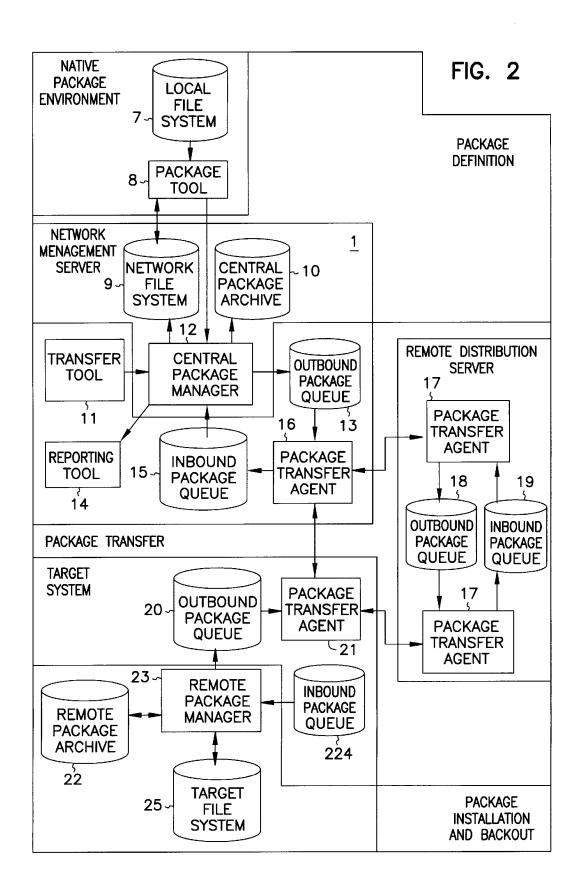
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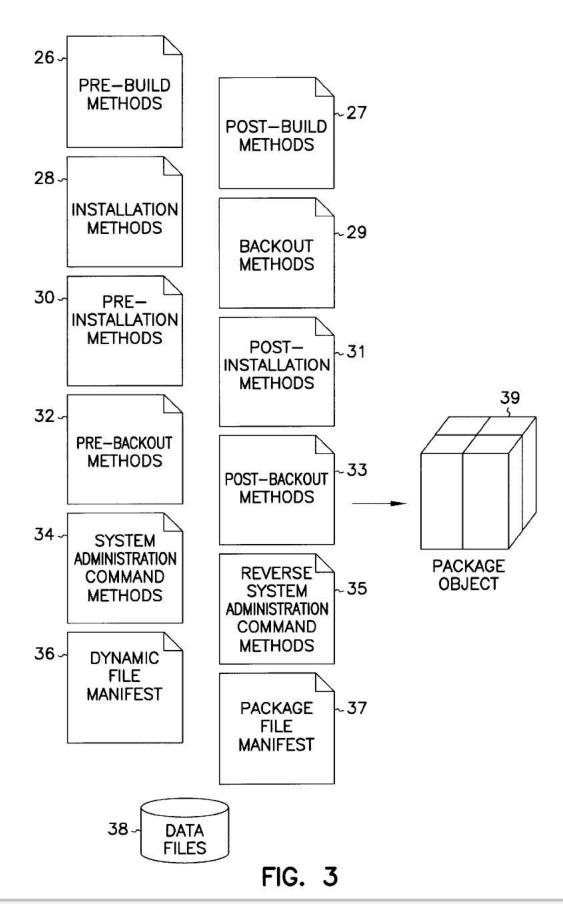












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