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Breslau et al.

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[54] METHOD AND SYSTEM FOR ON-DEMAND SOFTWARE DISTRIBUTION

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[22] Filed: **Dec. 27, 1995**

[51] Int. Cl.⁶ **G06F 12/08**

[52] U.S. Cl. **711/203; 395/200.46**

[58] Field of Search **395/200.03, 200.07, 395/413, 492, 200.46; 711/203, 204, 165**

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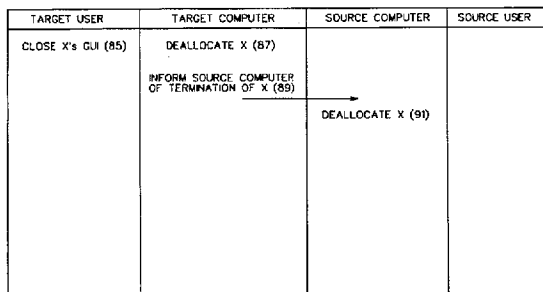
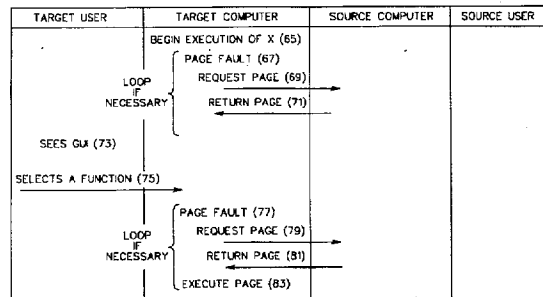
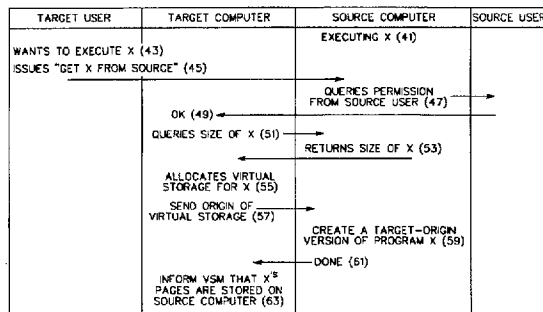
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[57] ABSTRACT

Techniques are presented for efficiently transferring computer code from a source computer to a target computer for execution on the target computer. A virtual memory space for the computer code is created on the target computer. The computer code is linked on the source computer such that addressing of the resulting executable version of the computer code corresponds to the allocated virtual memory space on the target computer. The executable computer code is then stored in the memory of the source computer. As the target computer executes the computer code, page faults result because its allocated virtual memory space is empty. The memory pages required to remediate the page faults are obtained from the source computer on an on-demand basis. Execution accordingly proceeds.

38 Claims, 10 Drawing Sheets



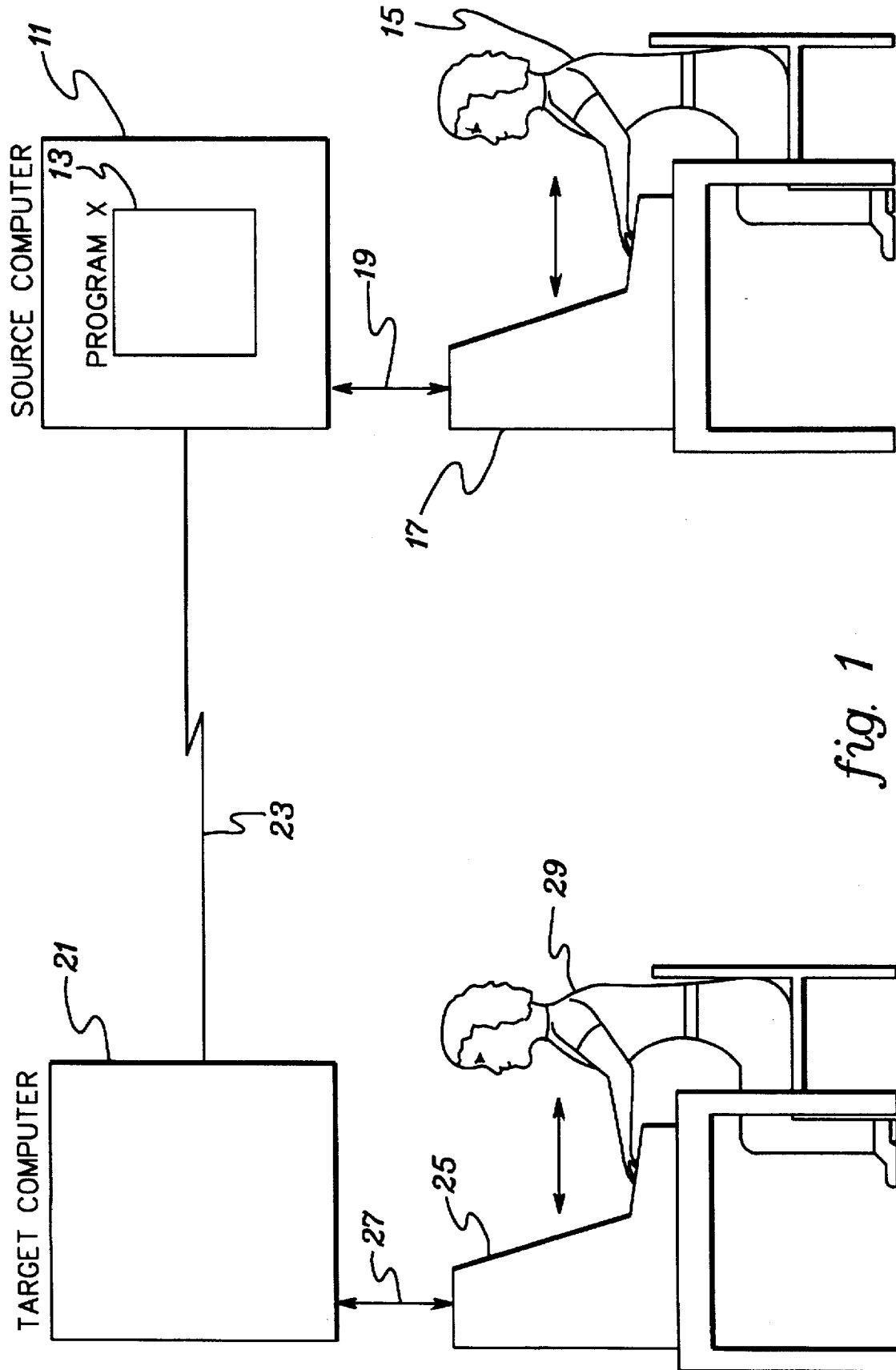


fig. 1

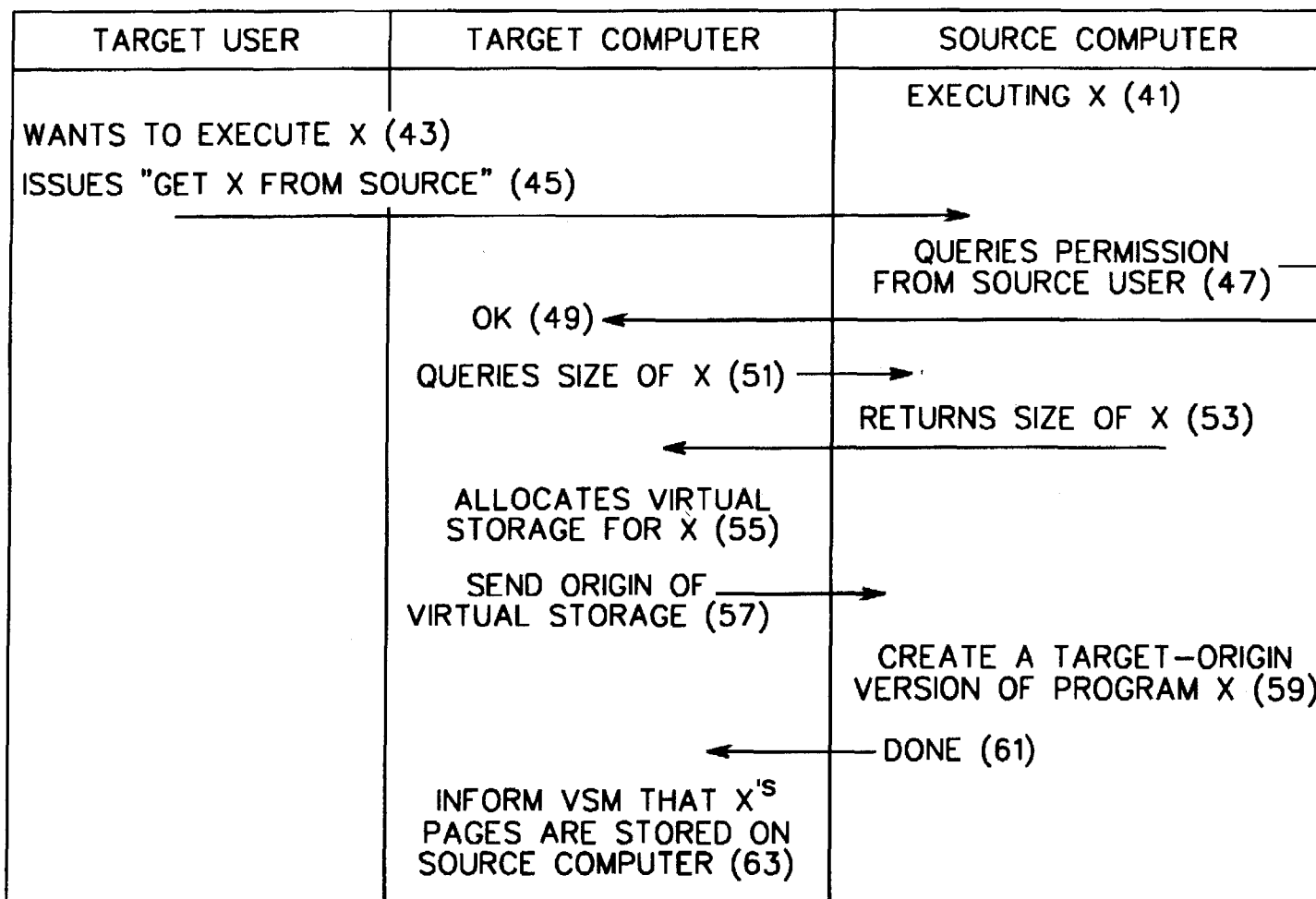


fig. 2A

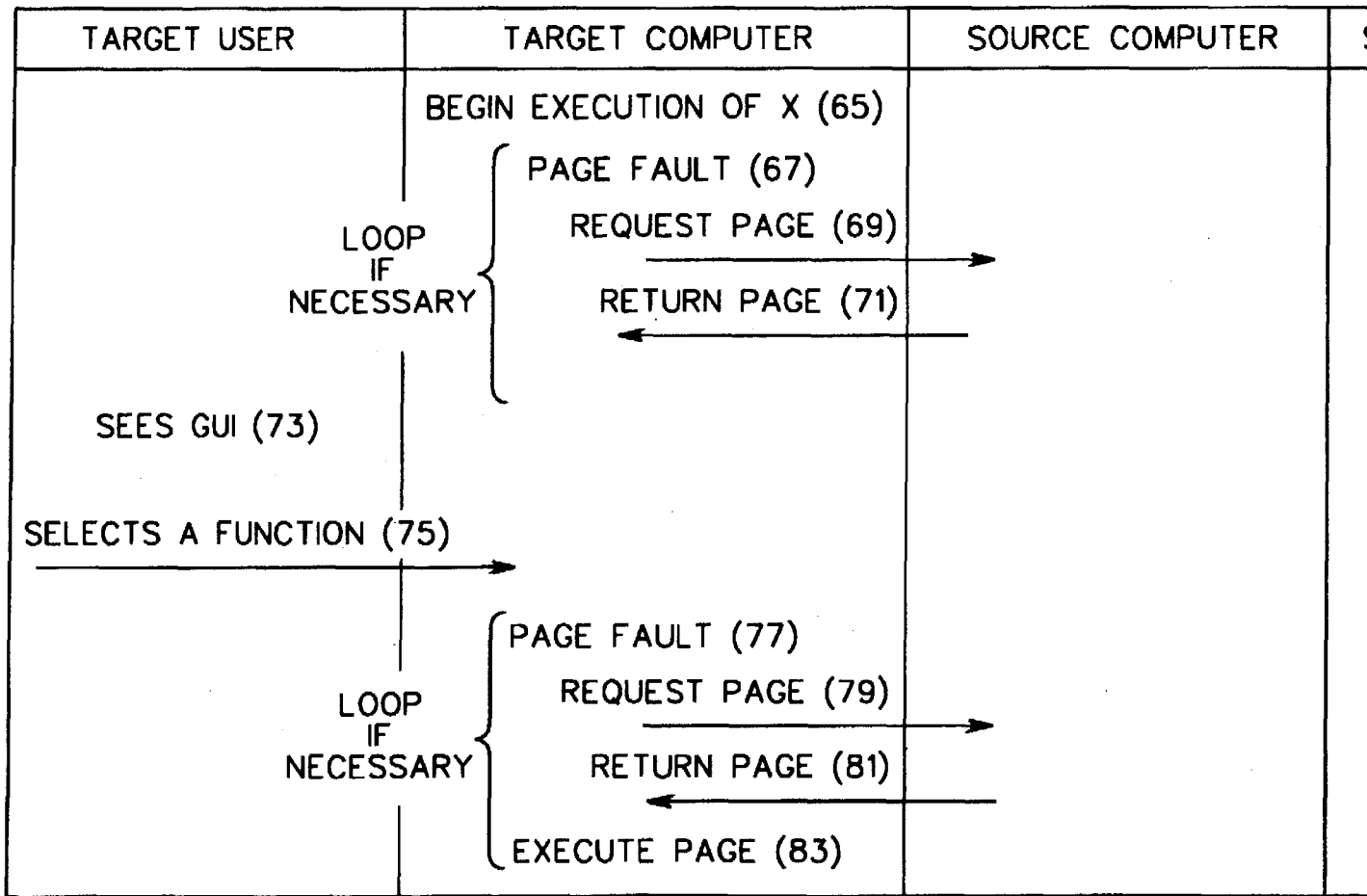


fig. 2B


| TARGET USER | TARGET COMPUTER | SOURCE COMPUTER |
|--------------------|--|-------------------|
| CLOSE X's GUI (85) | DEALLOCATE X (87) INFORM SOURCE COMPUTER OF TERMINATION OF X (89)  | DEALLOCATE X (91) |

fig. 2C

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