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Malik

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(54) **SMART ALLOCATION OF BANDWIDTH FOR MULTIPLE INDEPENDENT CALLS ON A DIGITAL NETWORK**

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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.

This patent is subject to a terminal disclaimer.

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(51) **Int. Cl.**⁷ **H04L 12/28**; H04J 3/16; H04J 3/12

(52) **U.S. Cl.** **370/390**; 370/468; 370/524

(58) **Field of Search** 358/434, 400, 358/405; 709/238, 250, 227, 226; 370/392, 390, 431, 410, 468, 524, 264, 432, 385, 395.1, 395.2, 381, 384

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Primary Examiner—Chau Nguyen

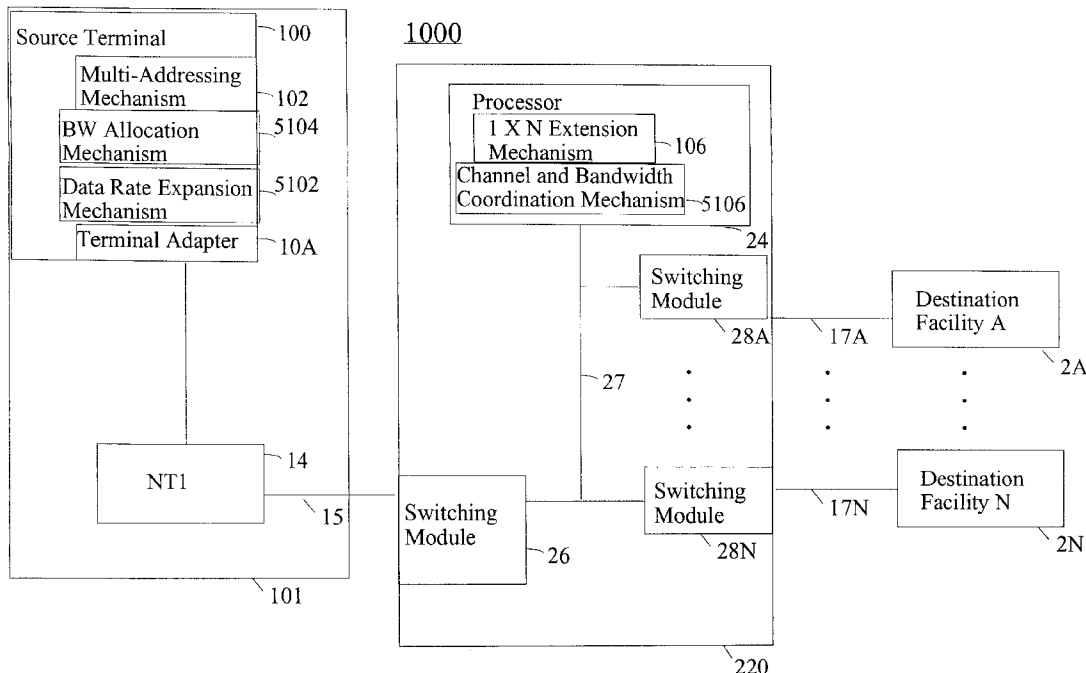
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(57) **ABSTRACT**

A method and apparatus in a computer network system form a setup message at a source terminal. The setup message includes a bandwidth coordination message that identifies respective subchannel data rates to be used when sending data to respective destination terminals. The setup message identifies respective data rates and associated destination terminals, and the setup message is sent to a switch facility, that interconnects the source terminal and the respective destination terminals. The switch extracts the bandwidth coordination message and establishes subchannel links, such as subchannels of one or two ISDN B channels. Once the respective links are established, the source terminal transmits a message via the switch to the respective destination terminals at the data rates corresponding with the subchannel data rates established by the switch facility, and as requested by the source terminal.

13 Claims, 13 Drawing Sheets



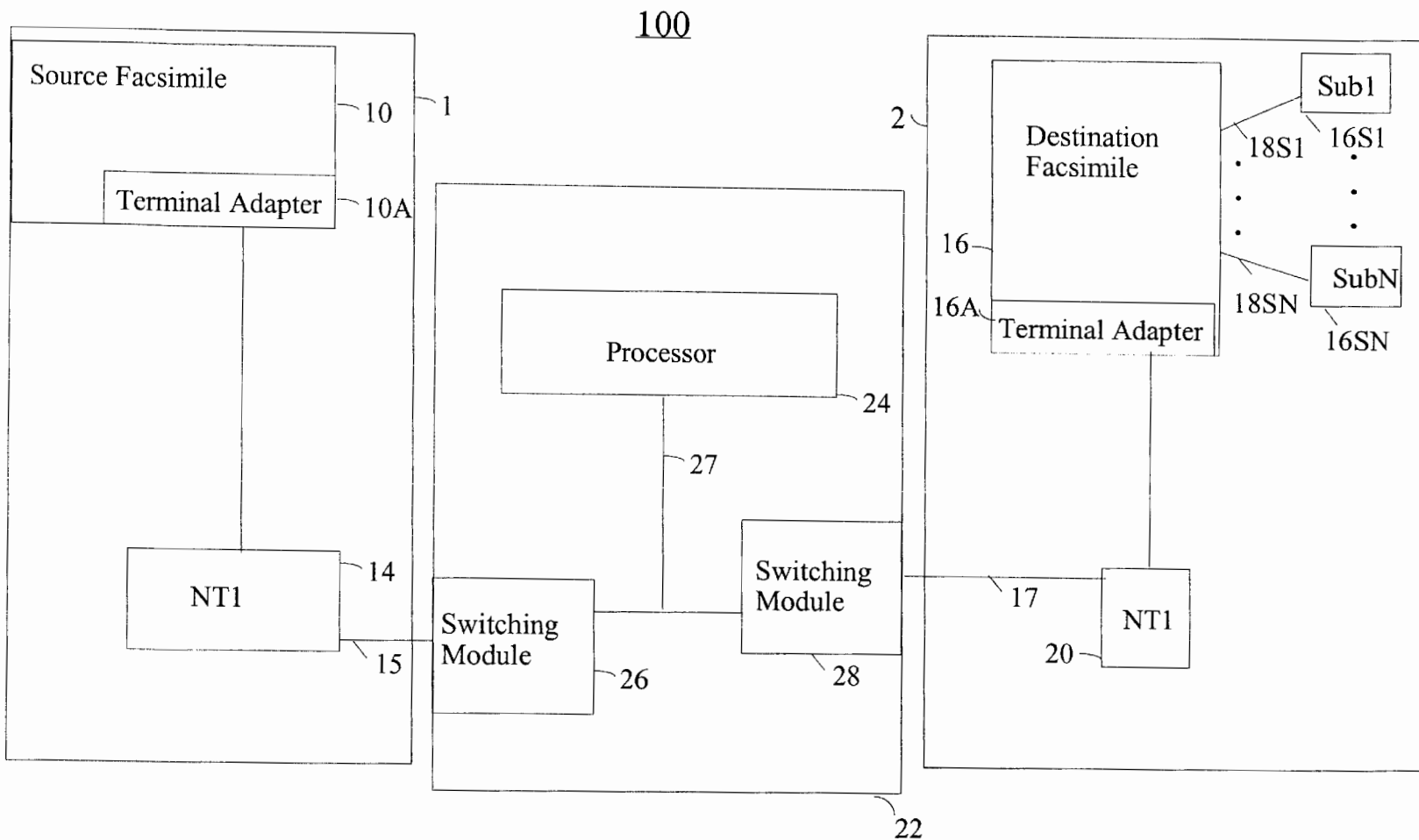


Fig. 1 (Background Art)



200

(Background Art)

Fig. 2

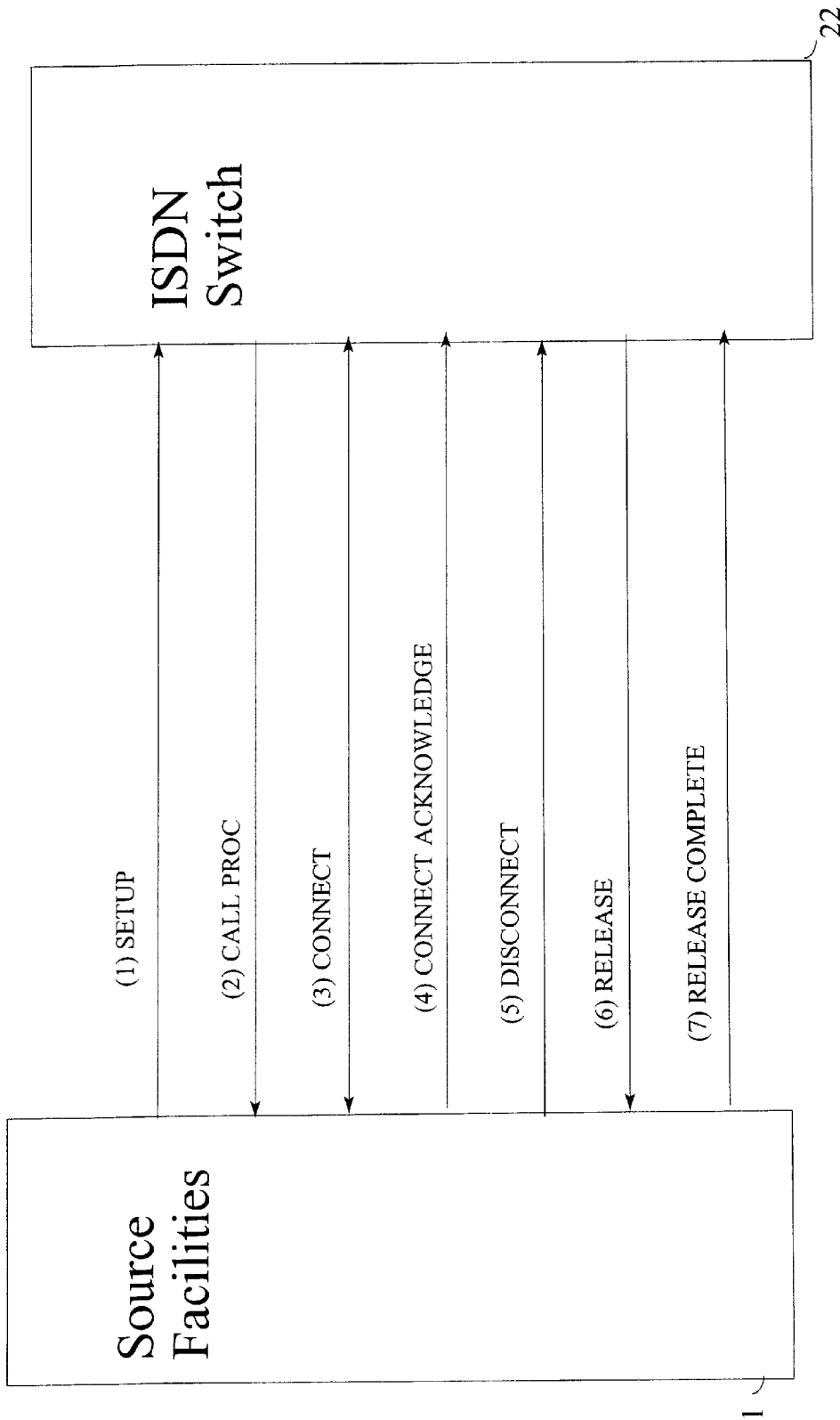


Fig. 3 (Background Art)

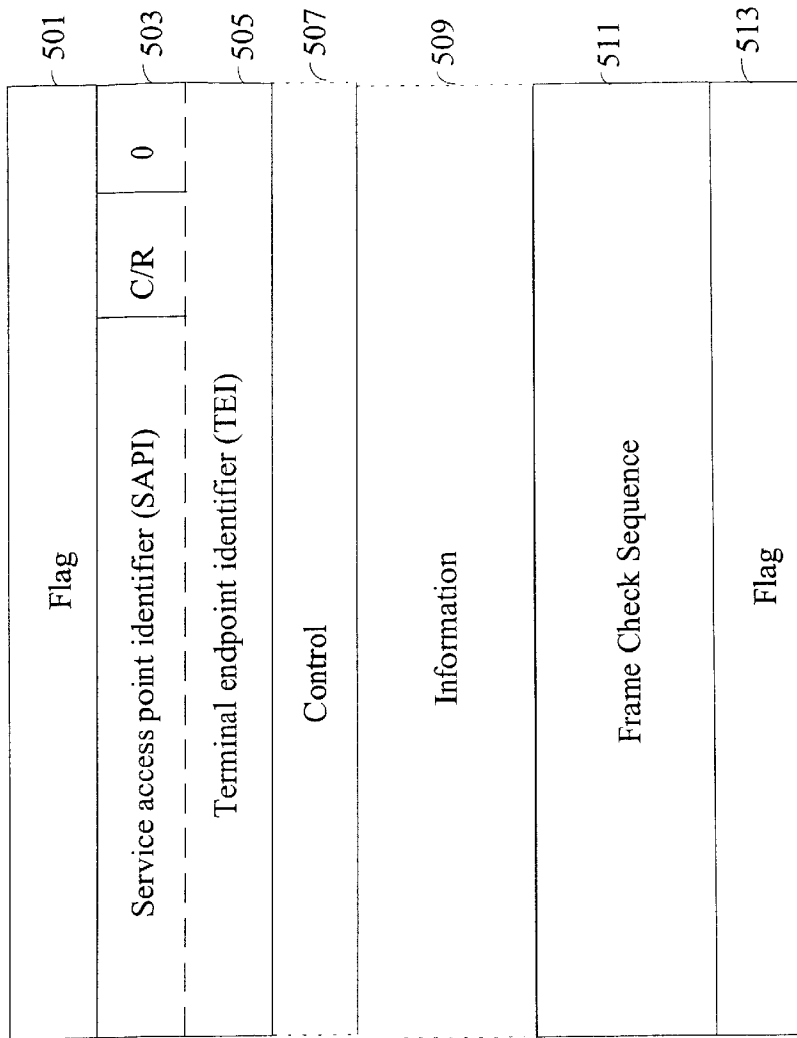


Fig. 4 (Background Art)

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