SG 9705407-6
RTMP
COPY

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04N 7/173 — A1

(11) International Publication Number: WO 96/38002

(43) International Publication Date: 28 November 1996 (28.11.96)

(21) International Application Number: PCT/US96/07565

(22) International Filing Date: 23 May 1996 (23.05.96)

(30) Priority Data:
08/447,537 24 May 1995 (24.05.95) US

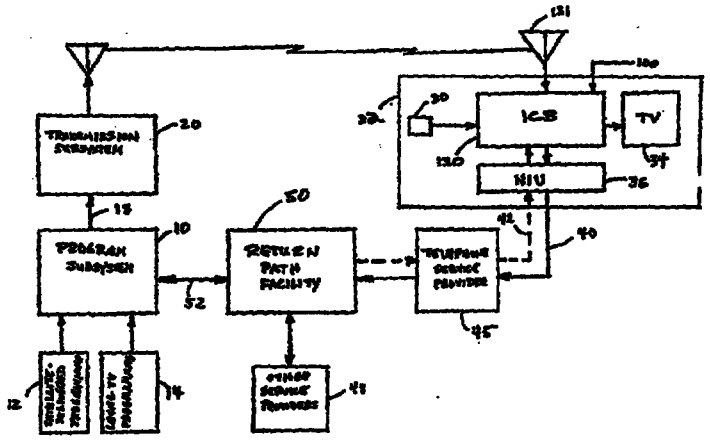
(71) Applicant: BELLSOUTH CORPORATION [US/US]; 1155 Peachtree Street, N.E., Atlanta, GA 30309-3610 (US).

(72) Inventors: ARIAS, Salvador, Luis; 2899 Greystone Cove, Chamblee, GA 30341 (US). COMER, Edward, Irby; 4688 Amberwood Trail, Marietta, GA 30062 (US). DUNN, Roy, Curtis; 4050 Oak Hill Road, Douglasville, GA 30135 (US). FRERKING, Melvin, Duane; 2566 Bailey Drive, Norcross, GA 30071 (US). DANNER, Fred, Thomas, III; 2850 Lake Wind Court, Alpharetta, GA 30202 (US). BERGEN, Richard, Sammis, Jr.; 2875 Laurel Green Court, Roswell, GA 30076 (US). ELLIOTT, Sidney, Walker; 7685 Brigham Drive, Atlanta, GA 30350 (US). EVANS, Thomas, Franklin; 2079 Mountain Creek Road, Stone Mountain, GA 30087-1030 (US). CHAMBERS, Craig, Brent; 171 Glenloch Parkway, Stockbridge, GA 30281 (US).

(81) Designated States: AL, AM, AU, BB, BG, BR, CA, CN, CZ, EE, GE, HU, IS, JP, KG, KP, KR, LK, LR, LS, LT, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, SG, SI, SK, TR, TT, UA, UZ, VN, ARIPO patent (KE, LS, MW, SD, SZ, UG), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG).

Published
With international search report.

(54) Title: ASYMMETRIC DATA COMMUNICATIONS SYSTEM



(57) Abstract

An asymmetrical data communications system (ADCS) provides point-to-multipoint television programming including conventional television programming, near video-on-demand (NVoD) or video-on-demand (VoD), and the full variety of available programming, via a compressed, digitized UHF transmission. A program subsystem of the ADCS receives programming from content providers and processes the received signals for channel and VoD or NVoD service, then sends the aggregated signal to a transmission subsystem that modulates, channelizes, amplifies, filters and broadcasts the digital UHF signals over the air. Subscribing viewers are equipped with an intelligent control box (ICB) suitably configured to receive, demodulate, and decode the digital UHF broadcast and to transmit the resulting signal to one or more display or other terminal devices. The ICB further provides a matrix switch or gateway for receiving signals over any available transmission path. In addition to the ICBs of the subscribing viewers, a return path subsystem of the ADCS system includes a session control and administrative facility to which the ICBs are linked via the public switched telephone network or suitable wireless alternative so that transaction and viewing data can be received from the subscribing viewers. The return path subsystem, in turn, is linked to the program subsystem in order to route to that subsystem any information necessary or useful for providing programming.