9801180-2

IPO 5 copy

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 : H04N 5/44, 7/24

A1

(11) International Publication Number: ✓WO 97/03518

(43) International Publication Date: 30 January 1997 (30.01.97)

(21) International Application Number: ✓PCT/US96/11017

(22) International Filing Date: ✓28 June 1996 (28.06.96)

(30) Priority Data:
✓501,334 ✓12 July 1995 (12.07.95) US ✓

(71) Applicant: THOMSON CONSUMER ELECTRONICS, INC. ✓ [US/US]; 10330 North Meridian Street, Indianapolis, IN 46290-1024 (US) ✓ ✓

(72) Inventor: STEWART, John, Sidney; ✓3655 West 71st Street, Indianapolis, IN 46268 (US). ✓

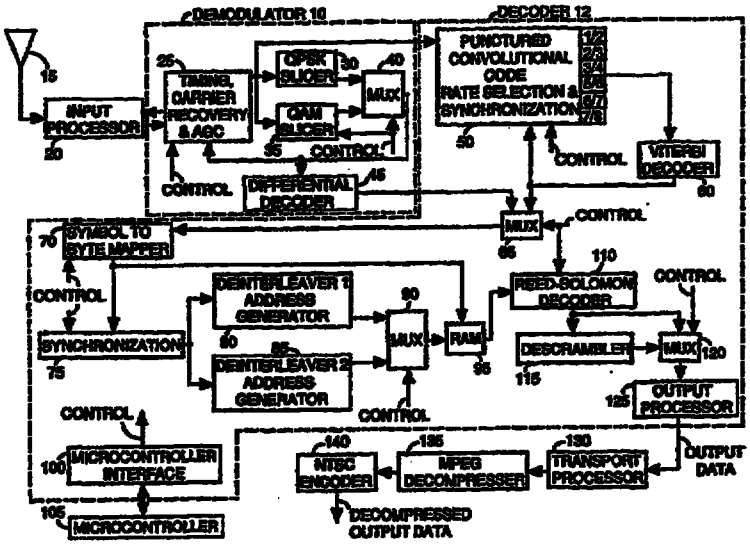
(74) Agents: TRIPOLI, Joseph, S. et al.; GE & RCA Licensing Management Operation, Inc., CN 5312, Princeton, NJ 08540 (US).

(81) Designated States: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, 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.
With amended claims.

30 MAR 1998 REGISTRY OF TRADE MARKS & PATENTS SINGAPORE

(54) Title: APPARATUS FOR DECODING VIDEO SIGNALS ENCODED IN DIFFERENT FORMATS ✓



(57) Abstract

An adaptive receiver includes an adaptive decoder (12) for providing decoded output data from a video signal encoded for satellite; terrestrial or cable transmission. The apparatus includes an adaptive decoder (50, 60) for providing a first decoded output as a function of a coder rate selected from a plurality of code rates. The apparatus also includes an adaptive deinterleaver (80, 85, 90) for deinterleaving the first decoded output in accordance with a deinterleaving function selected from a plurality of deinterleaving functions. In addition, the apparatus includes an output signal processor (125) for processing the deinterleaved output data to provide the decoded output data. The demodulator may also incorporate an adaptive error decoder (110) for detecting and correcting errors in the deinterleaved output. In additon, a signal quality detector may provide an estimate of the error in the decoded output data. The apparatus is automatically configured to be compatible with the encoded video signal format in response to the error estimate.