

Title (en)

VITERBI DECODER SYSTEM WITH TRACE-BACK IMPLEMENTATION

Title (de)

VITERBI-DEKODERSYSTEM MIT TRACE-BACK IMPLEMENTIERUNG

Title (fr)

SYSTEME DE DECODEUR VITERBI A CONFIGURATION DE RETRA AGE

Publication

EP 1119916 A1 20010801 (EN)

Application

EP 00949426 A 20000731

Priority

- EP 00949426 A 20000731
- EP 0007411 W 20000731
- EP 99202647 A 19990816

Abstract (en)

[origin: WO0113524A1] A Viterbi decoder comprises branch metric generating means (22) for generating for each of a plurality of trellis branch data received a respectively associated branch metric, add-compare-select means (26) for pathwise accumulating the generated branch metrics to path metrics, and associating to each trellis state an optimum path and, by selecting amongst various optimum paths generating a set of survivor paths, and survivor memory means (32) for receiving and transiently storing the set of survivor paths. The decoder system is arranged for incremental updating of state pointers in a forward direction, which state pointers for each current actual state indicate with respect to an interval of predetermined incrementing length up to at most a truncation length L, a preceding state to be reached through a traceback over an actual length of the interval, which updating is effected by for an actual survivor word copying its associated state pointer bit into a plurality of state pointer register means each associated to a respective current state pointer.

IPC 1-7

H03M 13/41; H04L 1/00

IPC 8 full level

G06F 11/10 (2006.01); **H03M 13/41** (2006.01); **H04L 1/00** (2006.01)

CPC (source: EP)

H03M 13/4107 (2013.01); **H03M 13/4169** (2013.01); **H03M 13/6505** (2013.01)

Citation (search report)

See references of WO 0113524A1

Citation (examination)

JP H09191258 A 19970722 - MATSUSHITA ELECTRIC IND CO LTD

Designated contracting state (EPC)

DE FR GB

DOCDB simple family (publication)

WO 0113524 A1 20010222; EP 1119916 A1 20010801; JP 2003507921 A 20030225

DOCDB simple family (application)

EP 0007411 W 20000731; EP 00949426 A 20000731; JP 2001517708 A 20000731