(19) Europäisches Patentamt
European Patent Office
Office européen des brevets

(11) EP 1 263 162 A8

(12) **CORRECTED EUROPEAN PATENT APPLICATION**
Note: Bibliography reflects the latest situation

(15) Correction information:
Corrected version no 1 (W1 A1)
INID code(s) 71

(48) Corrigendum issued on:
23.07.2003 Bulletin 2003/30

(43) Date of publication:
04.12.2002 Bulletin 2002/49

(21) Application number: **02291299.2**

(22) Date of filing: **28.05.2002**

(51) Int Cl.[7]: **H04L 7/02**

(84) Designated Contracting States:
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR
Designated Extension States:
AL LT LV MK RO SI

(30) Priority: **30.05.2001 FR 0107095**

(71) Applicants:
- **Mitsubishi Electric Information Technology Centre Europe B.V.**
  35700 Rennes (FR)
- **Mitsubishi Electric Corporation Information Technology R & D Center**
  Kanagawa 247-8501 (JP)

(72) Inventors:
- **Moy, Cristophe**
  35520 La Chapelle des Fougeretz (FR)
- **Le Corre, Pascal**
  35770 Vern Sur Seich (FR)

(74) Representative: **Blot, Philippe Robert Emile et al**
c/o Cabinet Lavoix,
2, place d'Estienne d'Orves
75441 Paris Cedex 09 (FR)

(54) Device and method for the digital demodulation of a signal received by selecting a filter and digital communication receiver comprising same

(57) The device (10) for digital demodulation comprises a polyphase filter (14) comprising a set of N distinct elementary digital filters and means (16) of selection, for each block of an elementary digital filter (H_i).

It comprises a decimating stage (18) for selecting samples in each block on completion of the digital filtering and means (20) for determining samples to be selected comprising means (28) for computing an error signal for each filtered block and means (31) for evaluating the error signal suitable for determining the samples to be selected in the relevant block. That the means (16) of selection of an elementary digital filter (H_i) comprise means (28) for calculating an error signal. The means (28) for calculating an error signal are common to the means (16) of selection of the elementary digital filter (H_i) to be implemented and to the means (20) for determining samples to be selected.

Application to a mobile telephone or base station.

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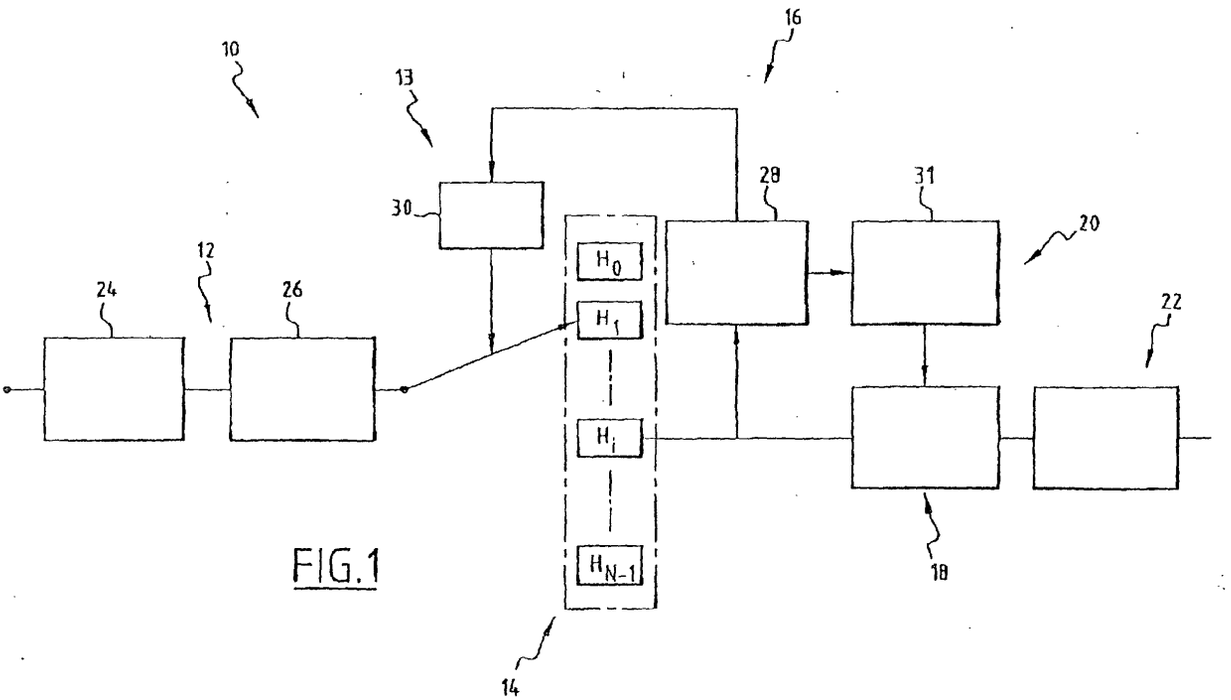

FIG.1