

Title (en)

TABLE LOOK-UP OF NON-LINEAR FUNCTIONS USING REDUCED-SIZED ROM.

Title (de)

SUCHTABELLE FÜR NICHTLINEARE FUNKTIONEN UNTER BENUTZUNG EINES FESTWERTSPEICHERS REDUZIERTER GRÖSSE.

Title (fr)

TABLE DE CONSULTATION POUR FONCTIONS NON LINEAIRES UTILISANT UNE MEMOIRE MORTE DE DIMENSIONS REDUITES.

Publication

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Application

**EP 82900743 A 19820125**

Priority

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- US 29826981 A 19810831
- US 31909081 A 19811106

Abstract (en)

[origin: WO8202637A1] A digital memory (10) which contains digital data words representative of a desired symmetrical transfer characteristic of a digital signal processor. Digital signals which are to be processed are applied to the address inputs of the memory (10), producing output signals in conformance with the desired transfer characteristic. Advantage is taken of the symmetrical nature of the response characteristic to minimize the size of the memory. Data words corresponding to only a portion of the full dynamic range of the digital signal processor are stored in the memory (10), and memory locations are addressed and read out in accordance with the value of a polarity-determining bit of the input digital signal, with the output signals being translated over the required full dynamic range in accordance with the value of the polarity-determining bit. In a preferred embodiment of the invention, the memory (10) is a random access memory, with stored data values being altered in response to a user control to change the transfer characteristic of the processor.

IPC 1-7

**H04N 5/02**

IPC 8 full level

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Citation (search report)

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