

ABSTRACT

PROCESS FOR READING INFORMATION

The invention relates to a process for reading binary information written on a carrier and constituting at least one track, the said binary information having been written onto the carrier at the frequency F_{bit} , characterized in that it comprises a step of reading said binary information at the sampling frequency F_e so as to constitute a succession of successive read samples $SAM(k)$ of the same track, $SAM(k)$ being the read sample of order k , each read sample of order k having its phase $\phi(k)$ lying between 0 and 2π , a step of interpolation making it possible to calculate an interpolated sample $I(k)$ with phase equal to π corresponding to the read sample $SAM(k)$, on the basis of the read sample $SAM(k)$ and of the $i + j$ read samples $(SAM(k-i), \dots, SAM(k+j))$ which bracket the read sample $SAM(k)$ such that:

$$I(k) = a_{k-i} SAM(k-i) + \dots + a_k SAM(k) + \dots + a_{k+j} SAM(k+j),$$

the coefficients $a_{k-i}, \dots, a_k, \dots, a_{k+j}$ having values dependent on the law of interpolation chosen, and a step of validation making it possible to generate an information item (VAL) intended to validate or to invalidate the interpolated sample $I(k)$.

The invention applies more particularly to the reading of binary information written on a large number of tracks.

FIGURE 3