

ABSTRACT

**MODEM AND METHOD FOR TRANSMITTING DATA IN A MEDIUM NOTABLY
SUCH AS AIR AND WATER**

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Method for transmitting data comprising at least the following steps: emitting packets of at least two types: pure data (long packets), acknowledgments of receipt (acknowledgment) (short packets), each packet is formed of three components:

- 10 a - an acquisition preamble, (1) for presence detection and the joint
 determination of the initial values of the time shift and of the frequency
 shift,
- b - the data proper, (2),
- c - a set of unmodulated fixed carriers (3) making it possible to permanently
15 estimate the frequency shift.

Figure 2 to be published