



ABSTRACT
METHOD AND SYSTEM FOR DETECTING MOBILE DEVICE POSITION
INFORMATION FRAUD

5 Method for authenticating the position $P_1(t)$ of a
mobile element (10), a mobile element comprising at
least one GNSS receiver, k , having a function for
estimating the position $P_1(t)$ of this mobile element
10 (10), from said signals "authentic" of the GNSS
constellation, the aforementioned receiver being
potentially allocated by falsified signals, this
method being characterized in that it comprises, in
combination, at least the following steps:

- determining at least one datum (21) associated
15 with the position P_1 of a GNSS receiver, i ,
- Transmitting and storing said data (21),
- aggregating a number of data (22) associated
20 with the position of a number of GNSS receivers
belonging to a set $Ech(P_i)$, on a size of sample
and a period of time superior to given
thresholds, to obtain a significant statistical
data (25) characteristic of the authentic
signal,
- determining at least one consistency indicator
25 $I_c(P_i)$, (26), by comparing the first datum
associated with said receiver i and the
aggregated data (25) obtained from the set Ech
of receivers k , on an interval of time including
at least a position $P_i(t)$,
- 30 • authenticating (27) the position P_i of said
mobile element (10) by using one or more of said
consistency indicators $I_c(P_i)$ in an authenticity
decision function or to raise a suspicion of
fraud on behalf of the user of this receiver i ,
35 as regards the position P_i .

Figure 1 to be published

