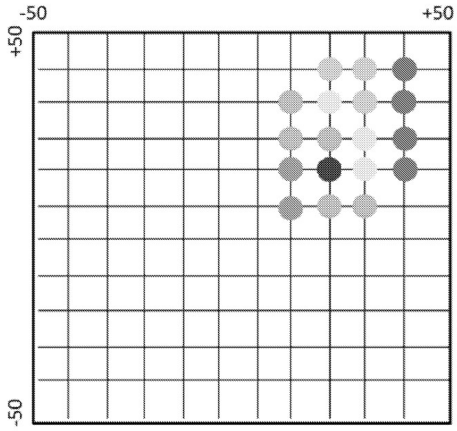
METHOD FOR REDUCING ERRORS ASSOCIATED WITH MULTIPLE PATHS

Technological advantages

- **Reduced computational costs and processing time**
- **Can be adapted to existing receiving devices**



Example for a correction array in the treatment of GNSS signals and multiple paths

Invention synthesis

The invention presents a process to estimate a corrected signal by reducing errors due to multiple paths.
GNSS positioning accuracy is degraded by multi-paths issues (direct path with superposing indirect paths due to reflection, refraction, diffraction).
The invention process is to analyze GNSS signals from multiple sources (satellites) to identify and isolate multiple paths (power, delay). An array is made for each multi-paths signal with a correction scale (value with a limited range based on the signal delay) to determine at least one corrected signal. Finally, a revision scale (based on an accuracy requirement) for the corrected signals is created.

Commercial benefits

- Applicable to existing receivers with low computing power requirements.
- Improves positioning especially in complex environments (such as urban canyons).

Potential applications

- GNSS positioning, applicable to smartphones, vehicles...

Patented invention - under license.

For more information :

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