

ABSTRACT OF THE DISCLOSURE

**TITLE OF INVENTION: WIRELES COMMUNICATION SYSTEM AND
METHOD AND SYSTEM FOR DETECTION
OF POSITION OF RADIO MOBILE STATION**

A method of detecting a position of a radio mobile station in radiocommunications, which is capable of accurately and simply finding the position of the mobile station. At a measuring point the mobile station measures the reception radio strength levels from a plurality of base stations and conveys the measurement results through the base station to a control station. The control station learns, through a neural network, the correlation between the reception radio strength levels and the position of the mobile station on the basis of the measurement results at a plurality of measuring points and the positions of the measuring points. Subsequently, when the mobile station communicates to the control station the reception radio strength levels measured at an arbitrary point, the control station estimates the position of the mobile station, causing that measurement results, on the basis of the correlation obtained through the learning.

Figure 1.