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**Watters et al.**

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(54) **DEVICES AND PROCESSING IN A MOBILE RADIO COMMUNICATION NETWORK HAVING CALIBRATION TERMINALS**

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This patent is subject to a terminal disclaimer.

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(57) **ABSTRACT**

In a mobile communication network, the accuracy of location determinations for mobiles based on TDOA measurements made by the mobiles is increased by measuring the TDOA of signals from base station pairs at a known location and generating correction factors for compensating timing and propagation errors in TDOA measurements made by the mobiles. Calibration terminals may be provided for measuring TDOAs at known locations. System processes and elements for applying data generated by calibration terminals are disclosed.

**62 Claims, 5 Drawing Sheets**

