

Title (en)
Electronic monitoring system.

Title (de)
Elektronisches Überwachungssystem.

Title (fr)
Système de surveillance électronique.

Publication
EP 0575753 A2 19931229 (EN)

Application
EP 93108236 A 19930521

Priority
US 89955892 A 19920616

Abstract (en)
An electronic monitoring system (10) for monitoring a large number of inmates confined in an institution is described. Each inmate wears a transmitter (14) which broadcasts an RF signal (18) at random times within a predetermined interval. Reference transmitters (16) positioned at known locations provide calibration so that local transmission anomalies and system variations are accounted for. The transmitted signals (18) contain a common code and also codes unique to each individual transmitter (12). Multiple receivers (22) positioned at known locations receive the transmitted signals (18). The relative times of arrival of the inmate and reference transmitter signals (18) at the multiple receivers (22) are used to determine the location of the inmate transmitters (14). The inmate transmitters (14) may also broadcast an intermittent acoustic signal (15) which is sensed by detectors (17) on the reference transmitters (16), which then transmit a tagged RF signal (18) indicating receipt of the acoustic signal (15). The system (10) provides updated inmate headcount and location about every second. <IMAGE>

IPC 1-7
G07C 9/00; G07C 1/20

IPC 8 full level
G01S 5/06 (2006.01); **G01S 11/02** (2010.01); **G07C 1/20** (2006.01); **G07C 9/00** (2006.01); **G07C 11/00** (2006.01); **G08B 21/22** (2006.01); **H04B 1/59** (2006.01)

CPC (source: EP)
G07C 1/20 (2013.01); **G07C 9/28** (2020.01); **G08B 21/22** (2013.01)

Cited by
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Designated contracting state (EPC)
DE ES FR GB IT SE

DOCDB simple family (publication)
EP 0575753 A2 19931229; EP 0575753 A3 19950816; AU 3698993 A 19931223; AU 657853 B2 19950323; JP H06124375 A 19940506; NZ 247865 A 19950726

DOCDB simple family (application)
EP 93108236 A 19930521; AU 3698993 A 19930416; JP 16735393 A 19930615; NZ 24786593 A 19930614