

Title (en)
ELECTRONIC ELECTRIC METER FOR NETWORKED METER READING

Title (de)
ELEKTRONISCHER STROMZÄHLER FÜR NETZWERKABLESUNG

Title (fr)
COMPTEUR D'ELECTRICITE ELECTRONIQUE POUR RELEVÉ DE COMPTEUR EN RESEAU

Publication
EP 0923742 A1 19990623 (EN)

Application
EP 97940881 A 19970905

Priority
• US 9715728 W 19970905
• US 2469896 P 19960906

Abstract (en)
[origin: WO9810299A1] An electronic electric meter for use in a networked automatic meter reading environment. The electric meter retrofits into existing meter sockets and is available for new meter installations for both single phase and three phase electric power connections. The meter utilizes an all electronic design including a meter microcontroller, a measurement microcontroller, a communication microcontroller and spread spectrum processor, and a plurality of other communication interface modules for communicating commodity utilization and power quality data to a utility. The electric meter utilizes a modular design which allows the interface modules to be changed depending upon the desired communication network interface. The meter measures electricity usage and monitors power quality parameters for transmission to the utility over a two-way 900 MHz spread spectrum local area network (LAN) to a remotely located gateway node. The gateway node transmits this data to the utility over a commercially available fixed wide area network (WAN). The meter also provides direct communication to the utility over a commercially available network interface that plugs into the meter's backplane or bus system bypassing the local area network communication link and gateway node.

IPC 1-7
G01R 22/00; H02J 13/00

IPC 8 full level
G08C 15/00 (2006.01); **G01D 4/00** (2006.01); **G01R 11/00** (2006.01); **G01R 22/00** (2006.01); **G08C 17/02** (2006.01); **H02J 13/00** (2006.01); **H04M 11/00** (2006.01); **H04Q 9/00** (2006.01); **G01R 21/133** (2006.01)

CPC (source: EP)
G01D 4/004 (2013.01); **G01R 22/00** (2013.01); **G08C 17/02** (2013.01); **H02J 13/00001** (2020.01); **H02J 13/00002** (2020.01); **H02J 13/00007** (2020.01); **H02J 13/00017** (2020.01); **H02J 13/00022** (2020.01); **H04Q 9/00** (2013.01); **G01R 21/133** (2013.01); **H02J 2213/10** (2020.01); **H04Q 2209/30** (2013.01); **H04Q 2209/40** (2013.01); **H04Q 2209/60** (2013.01); **Y02B 90/20** (2013.01); **Y02E 60/00** (2013.01); **Y04S 10/30** (2013.01); **Y04S 10/40** (2013.01); **Y04S 10/52** (2013.01); **Y04S 20/30** (2013.01); **Y04S 40/121** (2013.01); **Y04S 40/124** (2013.01); **Y04S 40/126** (2013.01)

Citation (search report)
See references of WO 9810299A1

Designated contracting state (EPC)
AT BE CH DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE

DOCDB simple family (publication)
WO 9810299 A1 19980312; CA 2264796 A1 19980312; CA 2264796 C 20040601; CA 2264913 A1 19980312; CA 2264913 C 20061114; EP 0923742 A1 19990623; EP 1019882 A1 20000719; JP 2000507707 A 20000620; JP 2000508455 A 20000704; JP 3346578 B2 20021118; JP 3485187 B2 20040113; WO 9810394 A1 19980312

DOCDB simple family (application)
US 9715728 W 19970905; CA 2264796 A 19970904; CA 2264913 A 19970905; EP 97940806 A 19970904; EP 97940881 A 19970905; JP 51289298 A 19970904; JP 51296898 A 19970905; US 9715570 W 19970904