



New connection on: : 23-08-2018 : 04:42:09 - Last disconnection on: : 23-08-2018 : 04:14:32

V 4.0.0.44358(LP,U,linux) (Rev:43856 2017-04-27 09:03:29 +0200#(D201802)) (RPM D201802)

Welcome to EPOQUE Rebuild under the Production Environment

[EPODOC: SS 1] irrigation and system

Results in EPODOC 17.105

[SS 2] 1 and zigbee

Results in EPODOC 136

[SS 3] 2 and gps

Results in EPODOC 0

[SS 4] 2 and sensor

Results in EPODOC 83

[SS 5] 4 and pressure

Results in EPODOC 6

[SS 6] ..li



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PN - [CN205121315U](#) U 20160330

PR - CN20152849347U 20151029

AP - CN20152849347U 20151029

DT - I

PA - UNIVSHANDONGAGRICULTURAL

TI - Intelligence big -arch shelter control **system** based on tall and erect **system** of ann

AB - The utility model discloses an intelligent big -arch shelter **system** based on the tall and erect **system** of ann, including main control **system**, **sensor** terminal, execution terminal equipment and subscriber equipment: the main control **system** adopts 32 high performance processor to carry on android intelligence operating **system** to match touch -sensitive screen and SD card A data storage device, the **sensor** terminal includes soil temperature **sensor**, soil moisture **sensor**, air temperature and humidity **sensor**, light intensity **sensor** and atmosphere **pressure sensor** to have SD card A data storage device, the security protection terminal includes smoke transducer, carbon monoxide transducer, ammonia gas **sensor** to have SD card A data storage device, carry out the terminal including the singlechip, book curtain machine control **system**, permeation **irrigation** control **system** and the SD card storage device that have the wireless receiving and dispatching function of **zigbee**, subscriber equipment links to each other with the main control **system**. The utility model discloses realization that can be convenient is to the remote control of big -arch shelter, and easy operation, flexibility are strong.

2/6	© EPODOC / EPO	
PN	- CN104871942 A 20150902	
PR	- CN20151220973 20150504	
AP	- CN20151220973 20150504	
DT	- I	
CT	- STSE (A) CN1413444 A 20030430 [A] (XI AN COLLEGE OF SCIENCE & ENG [CN]) [A] 1-5 * 全文 *; CN101349914 A 20090121 [A] (XIN HE [CN]) [A] 1-5 * 全文 *; CN101488025 A 20090722 [A] (BEIJING ACAD AGRIC & FORESTRY [CN]) [A] 1-5 * 全文 *; CN103999743 A 20140827 [A] (UNIV HANGZHOU DIANZI) [A] 1-5 * 全文 *	
CTNP	- STSE (A) [X] - 张胜, "基于ZigBee无线传感网和模糊控制的温室番茄智能灌溉系统设计", 《中国优秀硕士学位论文全文数据库 信息科技辑》 [X] 1-5 * 第136-536页 * [A] - 方旭杰等, "互通与ZigBee技术的无线智能灌溉系统的研制", 《农机化研究》 [A] 1-5 * 第114-118页 * [A] - 朱张青, "多用途节水灌溉控制系统研制", 《电气自动化》 [A] 1-5 * 第30-31页 *	
CCA	- Y02A40/238	
PA	- UNIV BEIHANG	
TI	- Multipurpose automatic irrigation control system	
AB	- The invention discloses a multipurpose automatic irrigation control system comprising a sensor node, a master controller and an actuator node. The sensor node, the master controller and the actuator node are communicated in a ZigBee wireless manner. The sensor node can measure the temperature, humidity, light and soil humidity information of a plant growth environment and transmits the information to the master controller through a wireless transmission module; the master controller receives environmental information acquired by the sensor node and generates an irrigation strategy, satisfactory to the needs of different growth periods, automatically for the different types of plants according to the preset plant types; the actuator node receives a control command sent by the master controller and drives a water supply to finish automatic irrigation . The multipurpose automatic irrigation control system meets the needs of the plants for moisture in the different growth periods and adapts to different water supply conditions, such as tap water and non- pressure stored water.	

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PN	- CN204014671U U 20141217	
PR	- CN20142509716U 20140904	
AP	- CN20142509716U 20140904	
DT	- I	
CCA	- Y02P60/122 ; Y02A40/238	
PA	- PEARL RIVER HYDRAULIC RES INST OF PEARL RIVER WATER RESOURCES COMMISSION	
TI	- Solar water-saving irrigation device based on ZIGBEE	
AB	- The utility model discloses a solar water-saving irrigation device based on ZIGBEE , and the solar water-saving irrigation device comprises a core processor, a valve control	

circuit connected with the core processor, an analogue acquisition circuit, a 485 bus circuit, a pulse counting circuit, a solid state memory circuit, a **ZIGBEE** communication circuit and a power supply circuit, wherein the valve control circuit is connected with a low power consumption valve, the analogue acquisition circuit is connected with a pipeline **pressure sensor**, the 485 bus circuit is connected with a soil humidity **sensor**, and the pulse counting circuit is connected with a pipeline flow **sensor**. The solar water-saving **irrigation** device, is characterized in that traditional power supply and communication manners are changed, solar energy is used as energy, the local self-assembling network will achieve wireless communication by adopting **ZIGBEE** communication technologies, monitoring of soil moisture content and pipeline **pressure** and flow is integrated with valve control, as a result, the solar water-saving **irrigation** device can be conveniently installed in the field to form a water-saving **irrigation** control **system**.

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PN	- CN203808151U U 20140903	
PR	- CN20142140955U 20140327	
AP	- CN20142140955U 20140327	
DT	- I	
PA	- UNIV ANHUI POLYTECHNIC	
TI	- Water storage device with constant pressure water supply function	
AB	- The utility model aims to provide a water storage device with a constant pressure water supply function. The water storage device comprises a reservoir; a water level detector is arranged at the edge in the reservoir and is used for detecting the water level in the reservoir; the water level detector is connected with a first Zigbee wireless communicator for transmitting water level information; the reservoir is connected with a water pump for lifting water; the water pump is connected with a controller to control the water pump; the controller is provided with a second Zigbee wireless communicator which receives the water level information transmitted by the first Zigbee wireless communicator. The water storage device with the constant pressure water supply function overcomes the defect of unstable water pressure of the traditional microirrigation device and adopts a constant pressure measurement, so the water irrigation or fertilization in the irrigation process is uniform and stable, and Zigbee which is a low-cost and low-consumption wireless sensor network technology with high reliability is applied to the water level control system , so the application flexibility of the whole device is improved, the detection capacity is improved, the inconvenience in wiring is reduced, and a microirrigation device can be enabled to irrigate crops in an efficient and water-saving mode.	

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PN	- CN203152178U U 20130828	
PR	- CN20132170452U 20130407	
AP	- CN20132170452U 20130407	
DT	- I	
CCA	- Y02P60/122 ; Y02A40/237	
PA	- UNIV NANJING SCIENCE & TECH	
TI	- Zigbee -based water-saving drip irrigation system	
AB	- The utility model discloses a Zigbee -based water-saving drip irrigation system . The water-saving drip irrigation system comprises control room equipment, a drip irrigation device and a site control device, wherein the site control device is arranged on the drip irrigation device to control the work of the drip irrigation device; the control room equipment is in wireless connection with the site control device to remotely monitor the site control device; the site control device comprises a plurality of terminal nodes; and each terminal node is in data communication with a Zigbee wireless network in a control room, comprises a solar power supply module, a sensor module, a wireless communication module and a valve driver module, can collect data, and can complete	

the task of controlling a valve. The **Zigbee**-based water-saving drip **irrigation system** can precisely control water **pressure** and the opening and the closing of a water dropper, can save more water compared with a current scheme of a drip **irrigation system**, adopts the solar energy to supply power, without laying cables, and can lower input cost to the largest extent.

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PN

- [CN103250617](#) A 20130821

PR

- CN20131118552 20130407

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DT

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CT

- || STSE (A)
[CN102172195](#) A 20110907 [A] (UNIV SOUTH CHINA AGRICULT)
[A]
[CN203152178U](#) U 20130828 [R] (UNIV NANJING SCIENCE & TECH)
[R]
[US6782310](#) B2 20040824 [A] (BAILEY DAVID FRANKLIN [US], et al)
[A]
[US2008119948](#) A1 20080522 [A] (O'CONNOR THOMAS M [US])
[A]
[CN201839670U](#) U 20110525 [A] (UNIV GUIZHOU)
[A]
[CN102217509](#) A 20111019 [A] (UNIV JIAXING)
[A]
[CN102037888](#) A 20110504 [Y] (CHONGQING CITY RES INST OF SCIENCE AND TECHNOLOGY)
[Y]

CTNP

- || STSE (A)
[] 郭毓灵等,
"基于ZigBee技术的无线自动滴灌系统设计", <<节水灌溉>>, (20110228), no. 2

CCA

- [Y02P60/122](#)

PA

- UNIV NANJING SCIENCE & TECH

TI

- **Zigbee** based water-saving drip **irrigation system**

AB

- The invention discloses a **Zigbee** water-saving drip **irrigation system** which comprises control chamber equipment, a drip **irrigation** device and an on-site control device. The on-site control device is arranged on the drip **irrigation** device to control the same to work, the control chamber equipment is wirelessly connected with the on-site control device to remotely monitor the same, the on-site control device comprises a plurality of terminal nodes, and each terminal node can realize data communication with a **Zigbee** wireless network sink node in a control chamber, comprises a solar power supply module, a **sensor** module, a wireless communication module and a valve driving module, and can collect data and complete valve control tasks. The **Zigbee** water-saving drip **irrigation system** can accurately control water **pressure** and opening and closing of water droppers and can save more water than the prior art. Solar power supply is adopted, so that cable laying is not needed and input cost can be lowered to the greatest extent.