



(19) **UA** (11) **83 600** (13) **C2**
(51) **II**

ΙΕΙΕΝΘΑΘΝΘΑΙ ΙΑΘΑÇΙΑΑΙΕΒ È ΙΑΘΕÈ
ΟΕΘΑΕΙÙ

ΑΙΝΘΑΑΘΝΘΑΑΙΙÙΕ ΑΑΙΑΘΘΑΙΑΙΟ
ΕΙΘΑΕΕΑΕΘΘΑΕΥΙΙΕ ΝΙΑΝΘΑΑΙΙΝΘΕ

(12) **ΙΙΕΝΑΙΕΑ ΕÇΙΑΘΑΘΑΙΕΒ È ΙΑΘΑΙΘΟ ΟΕΘΑΕΙÙ**

(21), (22) Çà àèà: **a200706761, 13.12.2005**

(24) Άαòà ιà-àèà ààέñòàè ιàòàιòà: **25.07.2008**

(30) Ιðέιðèòàò: **17.12.2004 DE 10 2004 062 169.1**

(46) Άαòà ιòάέèèàòèè: **25.07.2008**^{H02B} 1/20
20060101CFI20070618BHUA

(86) Çà àèà ÐÑÒ:

PCT/EP2005/056729, 20051213

(72) Εçιαðàòàòàèù:

**Είθιέääò Õáéèí, DE,
Íááíαóñ Ñááí, DE**

(73) Ιàòàιòíáèààáèàò:

ÑÈΙΑΙΝ ΑΕΘΕΑΙΑΑÇΥΕÙΘΑΘΘ, DE

(54) **ÐΑΝΙÐΑΑΑΕΕΘΑΕΥΙΙΑ ΟΝΘΙΕΝΘΑΙ**

(57) Ðàòàðàò:

Εçιαðàòàíèà ιòíñèòñ è ðáñιðáááèèòàèυíιό
óñòðíέñòàò (7) ñ, èáè ιèιèιòí, ááóí ιíáóèυíιè
òóíèòèííáèυíιè áéíèáíè (9), èιòιðùà ñíòááòñòááíí
íñíàυáíιð ñíñíáíιι è èíιιòàòèè óñòðíέñòáíι èáíáðù
(8) áè èíιιòàòèè ñ øéíííè èèíèáè èáíáðù (17),
èιòιðà èíáàò ñíááèíèòàèυíóp èèíèð (11). Άè
óíðíυáíè ιíòáæà ιðíáíáíà ðáñιðáááèèòàèυííáí
óñòðíέñòáà (7) ιðááóñíιòðáíí, +òí áè ñíááèíáíè
ñíñíáíιð è èíιιòàòèè óñòðíέñòá èáíáðù (8), èáè
ιèιèιòí ááòð ιíáóèυíιð ðóíèòèííáèυíιð áéíèíá (9) è
øéíííè èèíèè èáíáðù (17) ιðááóñíιòðáíι íáυèè øéíííè
ιíáóèυ (12; 22; 23), ιðè+áí øéíííè ιíáóèυ (12; 22;
23), áè ιðèñíááèíáíè èáæáíè èç ñíááèíèòàèυíιð
èèíèè (11) ιòááèυíιð ñíñíáíιð è èíιιòàòèè
óñòðíέñòá èáíáðù (8) è øéíííò ιíáóèð (12; 22; 23)

ñíòááòñòááíí áèèð+áàò ιòááèυííà ιðèáíðíá
ιíáèèð+áíèà (16), áè ιðèñíááèíáíè øéíííè èèíèè
èáíáðù (17) è øéíííò ιíáóèð (12; 22; 23) -
ιíáèèð+áíèà èáíáðííè øéíí (18), à áè ááèυááíè+áñéíè
ðáçá çèè ñá çè èáæáíáí èç ιðèáíðíð ιíáèèð+áíèè (16)
ñ ιíáèèð+áíèáí øéíííè èáíáðù (18) ñíòááòñòááíí -
ðáñííèíááííιè ιáæáó ιðèáíðíι ιíáèèð+áíèáí (16) è
ιíáèèð+áíèáí øéííι èáíáðù (18) ιòááèυíιè, íñíàυáíιè
ñðáííè óñèèèòáè -ιíáòíðèòáè (20) èáíáè ñá çè (19).

Ιðèòàèυíιè áèáàòáíυ "Ιðííðèáíá
ñíáñòááííñòù". Εíèää 1 "Εçιαðàòàíè, ιíèáçííá
ιíááèè, ðííáðàòèè èíááðàèυíιð ιèèðíñòáí", 2008, N
14, 25.07.2008. Αíñòááðñòááííιè ááíáðòáíáò
èíááèèáèòàèυííè ñíáñòááííñòè ιèíèòáðñòáá
íáðáçíááíè è íáóèè Οèðáèíι.

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PROPERTY

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PCT/EP2005/056729, 20051213

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**Koshmider Khaiko, DE,
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(73) Proprietor:

SIEMENS AKTIENGESELLSCHAFT, DE

(54) **SWITCHGEAR**

(57) Abstract:

The invention relates to a switchgear (7) comprising at least two modular functional units (9), each of which is provided with a communication-interfaced field device that is equipped with a terminal line (11) in order to communicate with a field bus link (17). In order to simplify wiring of said switchgear (7), a common bus module (12; 22; 23) is provided for coupling the communication-interfaced field devices (8) of the at least two modular functional units (9) to the field bus link (17). Said bus module (12; 22; 23) encompasses one respective separate device interface connection (16) for connecting each of the terminal lines (11) of the individual communication-interfaced field devices (8) to the

bus module (12; 22; 23), a field bus interface connection (18) for connecting the field bus link (17) to the bus module (12; 22; 23), and one respective separate coupling channel (19) which is positioned between the device interface connection (16) and the field bus interface connection (18) and is provided with a repeater circuit (20) in order to couple each of the device interface connections (16) in a galvanically separated manner to the field bus interface connection (18).

Official bulletin "Industrial property". Book 1 "Inventions, utility models, topographies of integrated circuits", 2008, N 14, 25.07.2008. State Department of Intellectual Property of the Ministry of Education and Science of Ukraine.



(19) **UA** (11) **83 600** (13) **C2**
(51)iiĒ

İ²İ²NÒAĐNÒAİ İNĀ²ÒÈ ² İAÓÈÈ ÓÈĐA¬İÈ

ĀĀĐÆĀĀİĒÈ ĀĀİĀĐÒĀİĀİÒ
²İÒĀÈĀÈÒÓĀÈÜİİ ĀÈĀNİİNÒ²

(12) İİÈN ĀÈİĀÖİĀÓ Āİ İÀÒĀİÓÓ ÓÈĐA¬İÈ

(21), (22) ĀĀİ² İòİİİĀİİ çà àèè:

a200706761, 13.12.2005

(24) Āàòà İàáòòò +èİİİİ²: **25.07.2008**

(30) ĀĀİ² İòİİİĀİİ İĐ²İĐèòáòó Ā²ĀİİĀ²Āİİ Āİ İàĐèçüēİĴ_{ēİİĀİÖ³Ĵ} : **17.12.2004 DE 10 2004 062 169.1**

(46) İóáè³èáò³ Ā²ĀİİİĤòáē İĐİ àèää+ó İàòĀİòó

(ĀāēēāĐāō³ēİİĀİ İàòĀİòó): **25.07.2008**_{H02B} 1/20

20060101CFI20070618BHUA

(86) İİİāĐ òà āàòà İİāİİ İ²æİāĐİĀİİĴ çà àèè Ā²ĀİİĀ²Āİİ
Āİ ĀİİĀİĀİĐÓ ĐNÒ:

PCT/EP2005/056729, 20051213

(72) ĀēİāĐ³Āİēē(è):

Ēİİİ²āāĐ Ōāēēİ, DE,

İāĀİāóİ Nāāİ, DE

(73) Āēāİİēē(è):

İ²İĀİN ĀÈÖ²ĀİĀĀÇĀÈÜÜĀÒÓ, DE

(54) ĐİÇİİĀ²ÈÜİĒÈ İĐÈNÒĐ²È

(57) ĐāóāĐāò:

ĀēİāĐ³Ā İòİİİ²òÜİİ ĐİÇİİĀ²ÈÜİİĀİ İĐÈİĤòĐİİ (7) ç İĐēİāēİİ² āāİĀ İİāóēÜİēİē ĐóİēÖ²İİāēÜİēİē áēİēāİē (9), ē³ ā²ĀİİĀ²Āİİ İİĀİÜĀİ² çāāóİēİ Āİ ēİİóİ²ēāō³Ĵ İĐēēāāİ ēāİāĐē (8) āē ēİİóİ²ēāō³Ĵ ç Đēİİİİ ē³İ² ēāİāĐē (17), ēēē İā° İİİēó+İó ē³İ² (11). Āē İİĐİÜĀİİ İİĐāæó İĐİĀİĀ²Ā ĐİÇİİĀ²ÈÜİİĀİ İĐÈİĤòĐİİ (7) İāĐāāāā+Āİİ, Üİ āē ç²ĀİĀİ çāāóİēĐ Āİ ēİİóİ²ēāō³Ĵ İĐēēāā² ēāİāĐē (8) İĐēİāēİİ² āāİĐ İİāóēÜİēĐ ĐóİēÖ²İİāēÜİēĐ áēİē²Ā (9) Āİ ĐēİİİĴ ē³İ² ēāİāĐē (17) İāĐāāāā+Āİēē çāāāēÜİēē Đēİİēē İİāóēÜ (12; 22; 23), İĐē+İİó Đēİİēē İİāóēÜ (12; 22; 23) āē

İĐē²ĀİĀİ ēİæİİĴ ²ç İİİēó+İēĐ ē³İ²ē (11) İēĐāİēĐ çāāóİēĐ Āİ ēİİóİ²ēāō³Ĵ İĐēēāā² ēāİāĐē (8) Āİ ĐēİİİĀİ İİāóē (12; 22; 23) ā²ĀİİĀ²Āİ İ²İòēòÜ İēĐāİā İĐēēāāİĀā İ²āēēİ²+Āİİ (16), āē İĐē²ĀİĀİ ĐēİİİĴ ē³İ² ēāİāĐē (17) Āİ ĐēİİİĀİ İİāóē (12; 22; 23) - İ²āēēİ²+Āİİ ēāİāĐİİĴ Đēİē (18), ā āē āāēÜāİ²+İİ ĐİÇĀ' çĀİİĀİ çĀ' çēó ēİæİİĀİ ç İĐēēāāİĀēĐ İ²āēēİ²+ĀİÜ (16) ç İ²āēēİ²+Āİİ İ Đēİē ēāİāĐē (18) ā²ĀİİĀ²Āİ - ĐİÇòāĐİĀāİēē İ²æ İĐēēāāİĀēİ İ²āēēİ²+Āİİ İ (16) ³ İ²āēēİ²+Āİİ İ Đēİē ēāİāĐē (18) İēĐāİēē, İİĀİÜĀİēē İĐāİİİ İ²āİēēİ²āā+ā-İİāòİĐİ²āā+ā (20) ēāİāē çĀ' çēó (19).

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8. Ðíçĩĩã³eũíeé ïðeñòð³é çà áóäü- èèì ç ïĩãðããĩ³ð ïóíeò³ã, èèé **ã³ãð³çĩ °ðũñ** òèì, ùĩ ãñ³ ïeðãĩ³, ïñĩäüãĩ³ ñðãĩĩþ ï³ãñeëþãà+à-ĩĩãòĩðþãà+à (20) èàíàèè çã' çêó øeĩĩĩãĩ ïĩãóè (12; 22; 23) ðĩçòàøĩããĩ³ á çãããeũĩĩó èĩðĩóñ³ (24).

9. Ðíçĩĩã³eũíeé ïðeñòð³é çà ïóíeòĩ 9, èèé **ã³ãð³çĩ °ðũñ** òèì, ùĩ ïðeëããĩã³ ï³ãeëþ+ãĩĩ (16) ³ ï³ãeëþ+ãĩĩ øeíe èàíãðè (18) àeëĩĩãĩ³ ó àeãè ã³ ã³ãĩeðãieþããĩĩç, ã³ã èĩðĩóñó (24) èĩĩĩĩãĩðè øòãeããðĩĩç ñeñòãìe.

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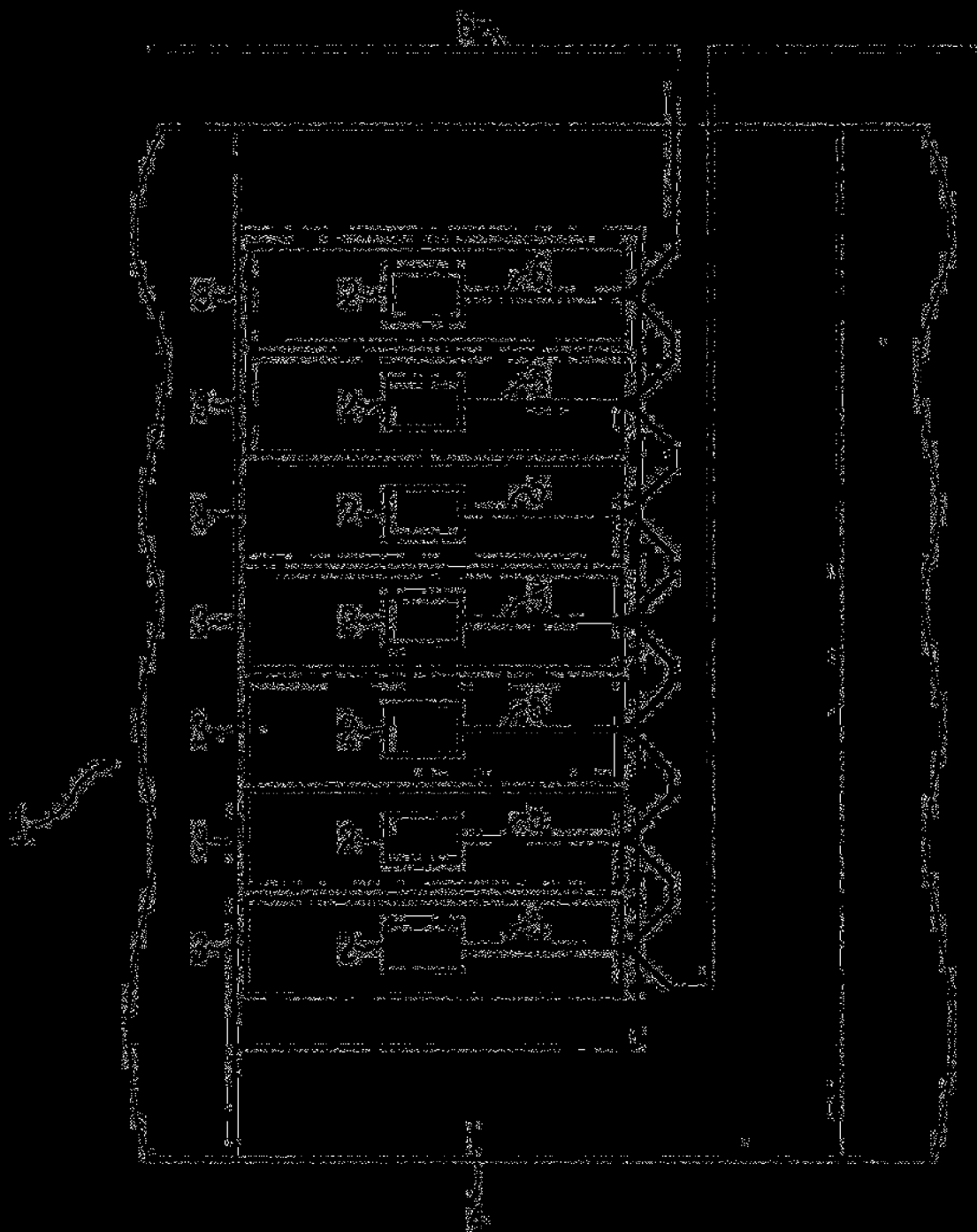
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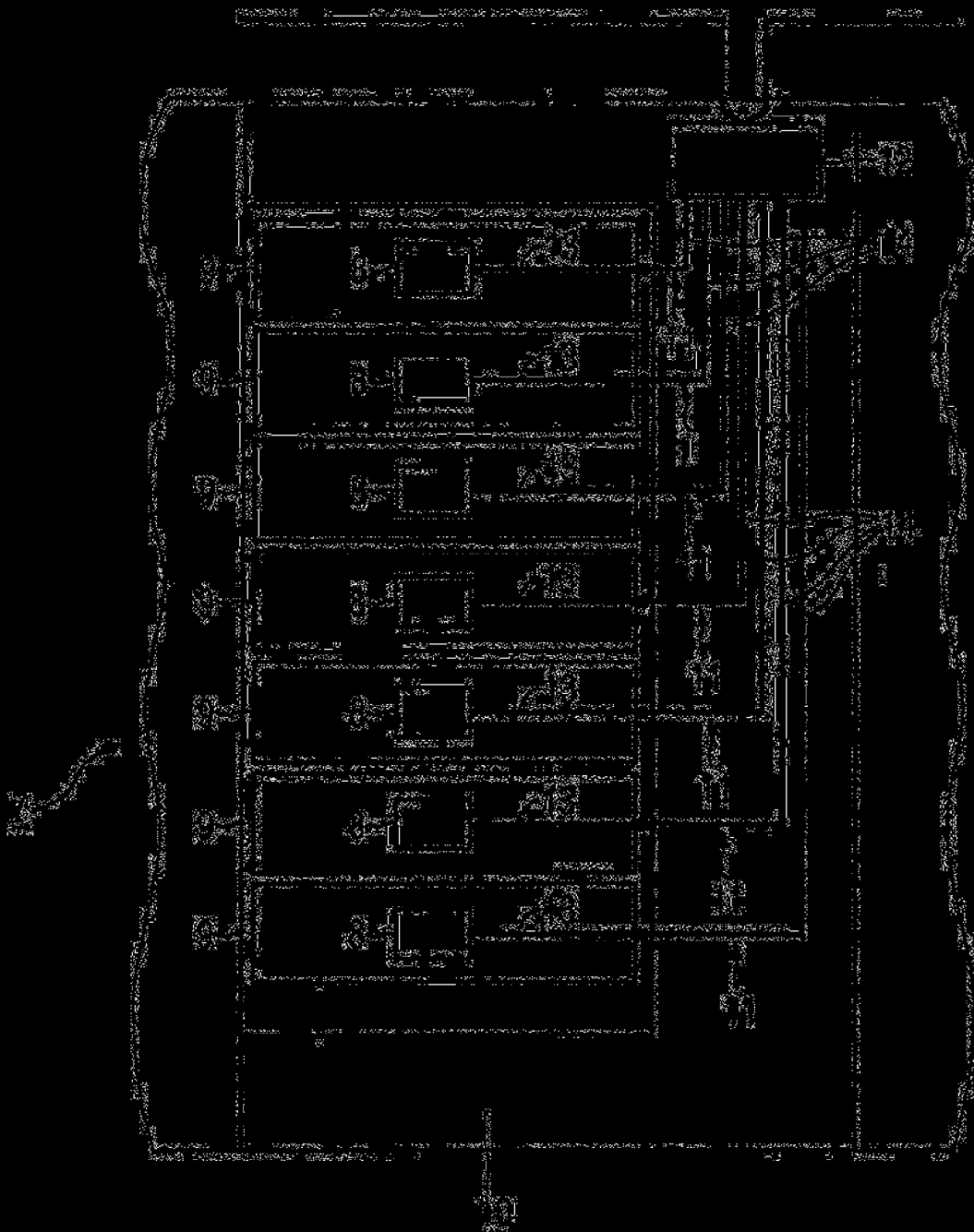
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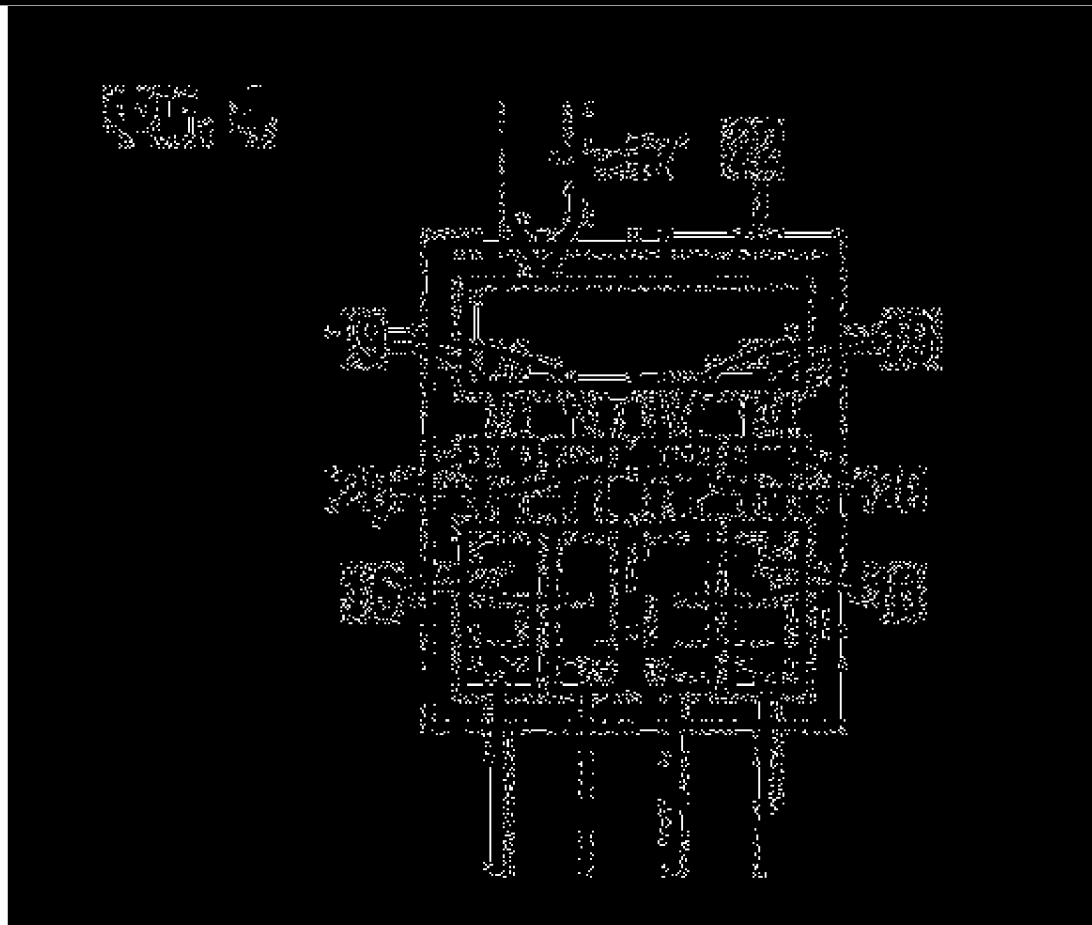
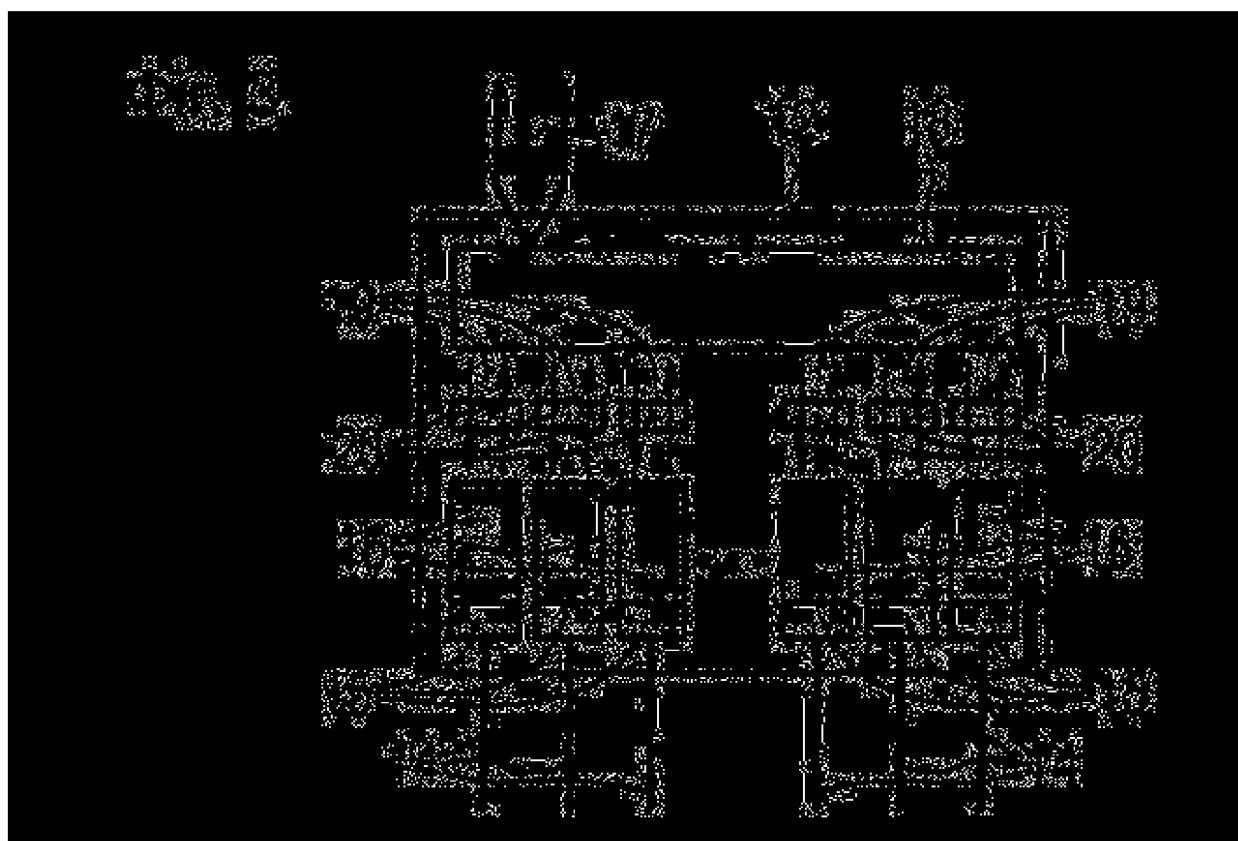
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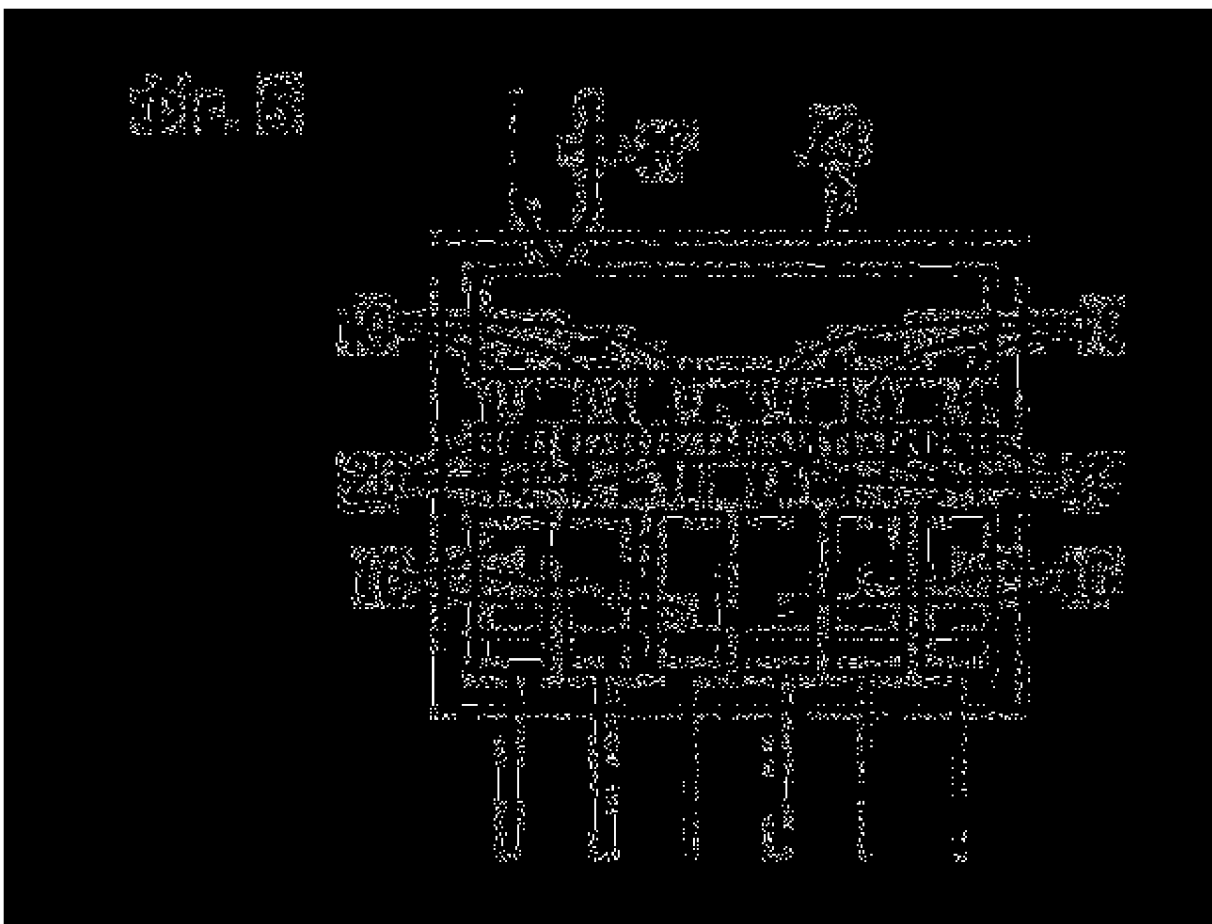
U A 8 3 6 0 0 C 2

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UA 83600 C2

U A 8 3 6 0 0 C 2



Íð³ð³éíéé áþéáðáíú "Íðííéñéíáà áéàñí³ñòú". Éíéää 1 "Áéíàðíäé, éíðéñí³ ííäáé³, ðíííäðáð³ç áíðääðáéúíéð í³éðíñðái", 2008, N 14, 25.07.2008. Äáðæááíéé äáíäððáíáíð³ áíðáéáéððáéúííç, áéàñííñð³ í³í³ðáðñðáà íñá³ðé³ á íáóéé Óéðàçíé.

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