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NL Octrooiencentrum

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-

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**14.12.2011**(73) Octrooihouder(s):  
**Marco Renée Barneveld te ALMERE.**  
**Jeffrey Steven Barneveld te DEVENTER.**(72) Uitvinder(s):  
**Marco Renée Barneveld te ALMERE.**  
**Jeffrey Steven Barneveld te DEVENTER.**(74) Gemachtigde:  
**mr. ir. J. van Breda c.s. te Amsterdam.**(54) **System for loading the batteries of an automotive vehicle.**

(57) System for loading the batteries of an automotive vehicle, comprising at least one series of loading poles, wherein each one of said loading poles is provided with an electrical outlet socket that is designed to receive a complimentary socket of a power consumer, usually connecting to the batteries of the automotive vehicle, and wherein it includes monitoring means for registry of the amount of electrical energy that is supplied to the connected power consumer, an access facility for enabling the flow of electrical energy to the power consumer that is connected to the electrical outlet socket, and a payment facility that is linked to the monitoring means for payment of a monetary value that represents the amount of electrical energy that is supplied to the connected power consumer, wherein the access facility is integrated in the payment facility and the payment facility is embodied with wireless communication means enabling a payer to initiate taking off electrical energy and pay for it by operating a mobile device having a unique identification code and arranged for communication with said wireless communication means.

NL C 2004792

Dit octrooi is verleend ongeacht het bijgevoegde resultaat van het onderzoek naar de stand van de techniek en schriftelijke opinie. Het octrooischrift komt overeen met de oorspronkelijk ingediende stukken.

## System for loading the batteries of an automotive vehicle

The invention relates to a system for loading the batteries of an automotive vehicle, comprising at least one series of loading poles, wherein each one of said loading poles is provided with an electrical outlet socket that is designed to receive a complimentary socket of a power consumer, usually connecting to the batteries of the automotive vehicle, and wherein it includes monitoring means for registry of the amount of electrical energy that is supplied to the connected power consumer, an access facility for enabling the flow of electrical energy to the power consumer that is connected to the electrical outlet socket, and a payment facility that is linked to the monitoring means for payment of a monetary value that represents the amount of electrical energy that is supplied to the connected power consumer. The automotive vehicle can be a car, a motorbicycle or scooter, or any other vehicle witch electrical propulsion means.

Such a system for loading the batteries is known from practice. In this system usually keys or membership cards are used to enable access to the system for taking off electrical energy in order to refill one's batteries. On a regular basis the amount of electrical energy that is monitored as to be consumed for filling up the batteries is invoiced to the holder of the key or membership card.

Newly proposed systems are devised to operate with pay-as-you-go means, using payment cards (PIN). This is however susceptible to fraud and improper use. Moreover it is expensive.

Still a further problem with the prior art system is that the monitoring means for registry of the amount of electrical energy that is supplied to the connected power consumer requires calibration, which is also expensive because this has to be done for any loading pole which is provided with such monitoring means.

The prior art system and its properties thus prevent the swift introduction and use of electrical automotive vehicles considering that there is a huge inbalance in costs of electrical energy supplied in a single loading cycle as compared to the costs of monitoring and paying for the electrical energy that is consumed in such a loading cycle.

An object of the invention is to put a limit to the

costs of monitoring and paying for the electrical energy as compared to the costs the electrical energy itself.

A further object is to propose a system for loading the batteries of an automotive vehicle which is versatile in its use, and which allows use thereof without being required to first being registered as a user.

Still a further object of the invention is to make the calibration of the loading poles, that is to say the amount of electrical energy that is taken off through any loading pole less cumbersome and costly to calibrate.

One or more of the above-mentioned objects of the invention are promoted by the system that is characterized by one or more of the appended claims.

In a first aspect of the invention the access facility is integrated in the payment facility and the payment facility is embodied with wireless communication means enabling a payer to initiate taking off electrical energy and pay for it by operating a mobile device having a unique identification code and arranged for communication with said wireless communication means.

By making the system accessible through the mobile device that has a unique identification code is possible to have the system used without need to first register as a user of the system. This allows for instance foreigners or other passersby that avail of a suitable mobile device to take benefit of the system.

Suitably the mobile device is a cell phone and/or a (laptop) computer. Such a computer needs to have wireless communication means, preferably wifi. Both cell phones and computers are provided with unique identification codes that enable that intended payments can be linked to the holder of the cell phone or computer.

To promote widespread use of the system of the invention for loading the batteries of an automotive vehicle the at least one series of loading poles have to be distributed in a service area. In order to limit costs and make effective use of the available resources, it is then preferred that the integrated access facility and payment facility are embodied in a central server to which the series of loading poles and the communication means are connected.

Preferably each one of the loading poles is provided

with a unique identifier. In connection therewith preferably also the access facility that is integrated in the payment facility enables taking off electrical energy of any such loading pole only when this unique identifier is communicated with the mobile device to the said wireless communication means of the integrated access and payment facility. This not only secures a selective consumption of electrical energy at specifically and only the loading pole that is identified with its unique identifier, as is communicated by the mobile device to the communication means of the access and payment facility. It also has the beneficial effect that when a loading pole is not selected the power to such loading pole is switched off. This is beneficial for the endurance of the system.

In another aspect of the invention each loading pole of a series of loading poles is connected to a central control unit that forms part of the same series of loading poles as the concerning loading pole, whereby this central control unit is embodied with the monitoring means for registry of the amount of electrical energy that is supplied to a power consumer connected to any of the loading poles in the concerning series of loading poles. This limits costs and makes calibration more easy because only the monitoring means that are provided in the central control unit are required to be calibrated.

The invention will hereinafter be further elucidated with reference to an exemplary embodiment of the system of the invention and with reference to the drawing.

The drawing shows in a single figure schematically the elements and the functional relation between these elements that may form part of the system of the invention.

In the figure reference 1 generally relates to the system of the invention for loading the batteries of an automotive vehicle 2.

The system 1 comprises at least one series of loading poles 3. Each one of said loading poles 3 is provided with an electrical outlet socket that is designed to receive a complimentary socket of a power consumer, usually connecting to the batteries of the automotive vehicle 2. This is known for the person skilled in the art and requires no further elucidation or reference in the drawing.

The system 1 includes further monitoring means (not shown yet also known to the person skilled in the art) for

registry of the amount of electrical energy that is supplied to the connected power consumer 2, and an access facility (not shown) for enabling the flow of electrical energy to the power consumer 2 that is connected to the electrical outlet socket.

5 Further there is a payment facility that is linked to the monitoring means for payment of a monetary value that represents the amount of electrical energy that is supplied to the connected power consumer 2. The aforesaid is all very common to the person skilled in the art and requires no further  
10 elucidation or explanation in order to enable the artisan to understand and appropriately devise the system accordingly.

More particularly according to the invention the access facility is integrated in the payment facility. The integrated access facility and payment facility are then preferably  
15 embodied in software operating on a central server 4. The said server 4 with the payment facility is further embodied with wireless communication means represented by the cloud 5, enabling a payer to initiate taking off electrical energy and pay for it by operating a mobile device 6, 7 having a unique  
20 identification code and arranged for communication with said wireless communication means 5.

As examples for the mobile device the figure shows a cell phone 6 and a (laptop) computer 7 provided with wifi.

With reference to the series of loading poles 3 that  
25 are distributed in a preselected service area, it can be remarked that these poles 3 are preferably also connected to the central server 4 in which the integrated access facility and payment facility is embodied, and to which server 4 also the said communication means 5 are connected that is arranged to  
30 communicate with the mobile devices 6, 7.

Although not shown it is preferable that each one of the loading poles 3 is provided with a unique identifier, and that the access facility that is integrated in the payment facility enables taking off electrical energy of any such  
35 loading pole 3, after it's unique identifier is communicated with the mobile device 6, 7 to the said wireless communication means 5 of the integrated access and payment facility of the central server 4.

The figure shows further another aspect of the  
40 invention that relates to the feature that each loading pole 3 of a series of loading poles is connected to a central control

unit 8 that forms part of the same series of loading poles as the concerning loading pole 3, and that the central server 4 in which the integrated access facility and payment facility is embodied connects also to the central control unit 8. This provides the possibility to have the central control unit 4 control release of electrical energy to a selected loading pole 3 connected to the central control unit 8.

The central control unit 8 is further embodied with the monitoring means for registry of the amount of electrical energy that is supplied to a power consumer 2 connected to any of the loading poles 3 in the concerning series of loading poles. Due to this arrangement the monitoring means for registry of the amount of supplied electrical energy is concentrated in the central control unit 8, and the electrical and electronic means in the loading poles 3 for supplying the electrical energy to any power consumer 2 can remain restricted.

The monitoring means that are arranged in the central control unit 8 for registry of the amount of electrical energy that is supplied to a power consumer 2 through any one of the poles 3, enable that the electrical energy that has been taken off through any loading pole 3 can be attributed to the payer who has used his mobile device 6, 7 for selecting the unique identifier of the pole 3 to which the power consumer 2 is connected.

To complete the picture the figure also shows that the central control unit 8 connects to the electrical grid 9 from which the electrical energy is derived.

#### Manner of operation

The system 1 of the invention can be used effectively in the following way.

When the power consumer 2 has arrived near to a loading pole 3 and is connected thereto, the concerning loading pole 3 can be activated. The activation of the loading pole 3 is executed by:

-dialing a preselected special-purpose telephone number and selecting in a computer guided menu the unique identifier of the intended loading pole 3. Payment is done automatically through the telephone bill.

-it is also possible to send an SMS to a preselected number wherein the SMS includes the unique identifier of the intended loading pole 3. By a reply SMS payment can be effectuated.

- 5 -it is further possible to use preestablished accounts and that payment is effected through such accounts. Selection of the loading pole 3 to be used by a power consumer 2 still occurs by making a selection with a mobile device, either a cell phone 6, or a laptop computer 7 with Internet facilities.

10

It is possible to complete the system 1 of the invention with further functionality which is considered beneficial for the system's users. This may for instance include a link of the system to systems for paid parking, and for  
15 implementation of special rebate or cashback systems.

For the avoidance of doubt it is further explicitly remarked that the scope of protection of the appended claims is not limited to the specific example that is discussed hereinabove with reference to the drawing. This example and the  
20 explanation provided with reference thereto only serves to remove any possible ambiguity that may reside in the claims when read in isolation. It does however not exclude the possibility that variations are applied to the offered example without departing from the scope of protection as embodied in the  
25 appended claims.

## CONCLUSIES

1. Systeem (1) voor het opladen van de batterijen van een zelf bewegend voertuig (2), omvattende ten minste een serie laadpalen (3), waarbij ieder exemplaar van genoemde laadpalen (3) is voorzien van een elektrische aansluiting die ontworpen is voor het ontvangen van een complementair gevormde stekker van een gebruiker (2), die gebruikelijk verbonden is met de batterijen van het zelf bewegend voertuig, en waarin deze monitormiddelen omvat voor het registreren van de hoeveelheid elektrische energie die toegevoerd wordt aan de verbonden gebruiker (2), een toegangsfaciliteit bezit voor het toelaten van het stromen van elektrische energie naar de gebruiker (2) die verbonden is met de elektrische aansluiting, en een betaalfaciliteit die gekoppeld is met de monitormiddelen voor het betalen van een geldswaarde die de hoeveelheid elektrische energie vertegenwoordigt die toegevoerd is aan de verbonden gebruiker (2), **met het kenmerk**, dat de toegangsfaciliteit geïntegreerd is in de betaalfaciliteit en dat genoemde betaalfaciliteit is uitgevoerd met draadloze communicatiemiddelen (5) die een betaler in staat stellen om het afnemen van elektrische energie te initiëren door het bedienen van een mobiele inrichting (6, 7) die een unieke identificatiecode heeft en die is ingericht voor communicatie met genoemde draadloze communicatiemiddelen (5).

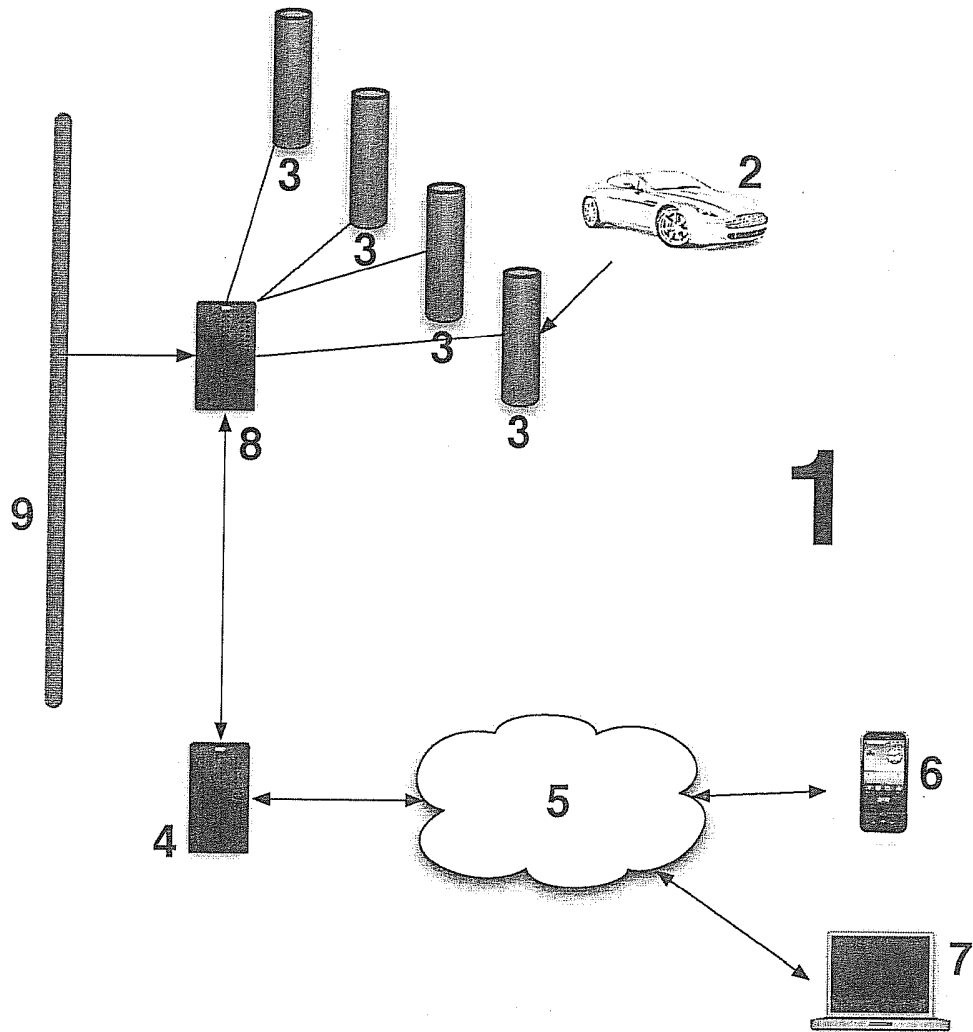
2. Systeem voor het opladen van de batterijen van een zelfbewegend voertuig volgens conclusie 1, **met het kenmerk**, dat de mobiele inrichting een mobiele telefoon (6) en/of een (laptop) computer (7) is.

3. Systeem voor het laden van de batterijen van een zelf bewegend voertuig volgens conclusie 1 of 2, waarin de ten minste ene serie laadpalen (3) gedistribueerd opgesteld staat in een bedieningsgebied, **met het kenmerk**, dat de geïntegreerde toegangsfaciliteit en betaalfaciliteit opgenomen zijn in een centrale server (4) met welke de serie laadpalen (3) en de communicatiemiddelen (5) verbonden zijn.

4. Systeem voor het laden van de batterijen van een zelf bewegend voertuig volgens één der voorgaande conclusies, **met het kenmerk**, dat ieder exemplaar van de laadpalen (3) voorzien is van een unieke merker, en dat de toegangsfaciliteit die geïntegreerd is in de betaalfaciliteit het afnemen van elektri-

sche energie naar ieder van de genoemde laadpalen (3) mogelijk maakt, waarvan de unieke merker met de mobiele inrichting (6, 7) naar genoemde draadloze communicatiemiddelen (5) van de geïntegreerde toegangs- en betaalfaciliteit is gecommuniceerd.

- 5                   5. Systeem voor het laden van de batterijen van een zelfbewegend voertuig volgens één der voorgaande conclusies, **met het kenmerk**, dat iedere laadpaal (3) van een serie laadpalen verbonden is met een centrale regeleenheid (8) die deel vormt van dezelfde serie laadpalen als de betreffende laadpaal (3),
- 10                   waarbij deze centrale regeleenheid (8) is uitgerust met de monitormiddelen voor het registreren van de hoeveelheid elektrische energie die toegevoerd is aan een verbruiker (2) die verbonden is met één van de laadpalen (3) van de desbetreffende serie laadpalen.



# SAMENWERKINGSVERDRAG (PCT)

## RAPPORT BETREFFENDE NIEUWHEIDSONDERZOEK VAN INTERNATIONAAL TYPE

|                                                                                                                                         |                                                                                                                          |
|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------|
| IDENTIFICATIE VAN DE NATIONALE AANVRAGE                                                                                                 | KENMERK VAN DE AANVRAGER OF VAN DE GEMACHTIGDE                                                                           |
|                                                                                                                                         | <b>NL 48292</b>                                                                                                          |
| Nederlands aanvraag nr.                                                                                                                 | Indieningsdatum                                                                                                          |
| <b>2004792</b>                                                                                                                          | <b>01-06-2010</b>                                                                                                        |
|                                                                                                                                         | Ingeroepen voorrangsdatum                                                                                                |
| Aanvrager (Naam)                                                                                                                        |                                                                                                                          |
| <b>Barneveld</b>                                                                                                                        |                                                                                                                          |
| Datum van het verzoek voor een onderzoek van internationaal type                                                                        | Door de Instantie voor Internationaal Onderzoek aan het verzoek voor een onderzoek van internationaal type toegekend nr. |
| <b>25-09-2010</b>                                                                                                                       | <b>SN 54887</b>                                                                                                          |
| <b>I. CLASSIFICATIE VAN HET ONDERWERP</b> (bij toepassing van verschillende classificaties, alle classificatiesymbolen opgeven)         |                                                                                                                          |
| Volgens de internationale classificatie (IPC)                                                                                           |                                                                                                                          |
| <b>G06Q30/00                      B60L11/18</b>                                                                                         |                                                                                                                          |
| <b>II. ONDERZOCHE GEBIEDEN VAN DE TECHNIEK</b>                                                                                          |                                                                                                                          |
| Onderzochte minimumdocumentatie                                                                                                         |                                                                                                                          |
| Classificatiesysteem                                                                                                                    | Classificatiesymbolen                                                                                                    |
| <b>IPC</b>                                                                                                                              | <b>G60Q                      B60L</b>                                                                                    |
| Onderzochte andere documentatie dan de minimum documentatie, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen |                                                                                                                          |
|                                                                                                                                         |                                                                                                                          |
| III. <input type="checkbox"/>                                                                                                           | <b>GEEN ONDERZOEK MOGELIJK VOOR BEPAALDE CONCLUSIES</b> (opmerkingen op aanvullingsblad)                                 |
| IV. <input type="checkbox"/>                                                                                                            | <b>GEBREK AAN EENHEID VAN UITVINDING</b> (opmerkingen op aanvullingsblad)                                                |

**ONDERZOEKSRAPPORT BETREFFENDE HET  
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar  
de stand van de techniek

NL 2004792

**A. CLASSIFICATIE VAN HET ONDERWERP**

INV. G06Q30/00 B60L11/18

ADD.

Volgens de Internationale Classificatie van octrooien (IPC) of zowel volgens de nationale classificatie als volgens de IPC.

**B. ONDERZOCHE GEBIEDEN VAN DE TECHNIEK**

Onderzochte minimum documentatie (classificatie gevolgd door classificatiesymbolen)

G06Q B60L

Onderzochte andere documentatie dan de minimum documentatie, voor dergelijke documenten, voor zover dergelijke documenten in de onderzochte gebieden zijn opgenomen

Tijdens het onderzoek geraadpleegde elektronische gegevensbestanden (naam van de gegevensbestanden en, waar uitvoerbaar, gebruikte trefwoorden)

EPO-Internal, WPI Data

**C. VAN BELANG GEACHTE DOCUMENTEN**

| Categorie ° | Geciteerde documenten, eventueel met aanduiding van speciaal van belang zijnde passages                                                                                                                                                                                                                                                  | Van belang voor<br>conclusie nr. |
|-------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|
| X           | WO 2009/098687 A2 (CELLOPARK TECHNOLOGIES LTD [IL]; LAVI ZEEV [IL]; SELOK GAD AZAR [IL]) 13 augustus 2009 (2009-08-13)<br>* samenvatting *<br>* figuur 1 *<br>* bladzijde 7, regels 20-22 *<br>* bladzijde 8, regels 8-26 *<br>* bladzijde 9, regel 24 - bladzijde 11, regel 10 *<br>* bladzijde 12, regel 19 - bladzijde 13, regel 11 * | 1-5                              |
| A           | US 6 081 205 A (WILLIAMS DOUGLAS J [US]) 27 juni 2000 (2000-06-27)<br>* samenvatting *<br>* figuren 3,4 *<br>* kolom 6, regel 12 - kolom 7, regel 36 *<br>-----<br>-/--                                                                                                                                                                  | 1-5                              |

☒ Verdere documenten worden vermeld in het vervolg van vak C.

☒ Leden van dezelfde octrooifamilie zijn vermeld in een bijlage

° Speciale categorieën van aangehaalde documenten

\*A\* niet tot de categorie X of Y behorende literatuur die de stand van de techniek beschrijft

\*D\* in de octrooiaanvraag vermeld

\*E\* eerdere octrooi(aanvraag), gepubliceerd op of na de indieningsdatum, waarin dezelfde uitvinding wordt beschreven

\*L\* om andere redenen vermelde literatuur

\*O\* niet-schriftelijke stand van de techniek

\*P\* tussen de voorrangsdatum en de indieningsdatum gepubliceerde literatuur

\*T\* na de indieningsdatum of de voorrangsdatum gepubliceerde literatuur die niet bezwarend is voor de octrooiaanvraag, maar wordt vermeld ter verheldering van de theorie of het principe dat ten grondslag ligt aan de uitvinding

\*X\* de conclusie wordt als niet nieuw of niet inventief beschouwd ten opzichte van deze literatuur

\*Y\* de conclusie wordt als niet inventief beschouwd ten opzichte van de combinatie van deze literatuur met andere geciteerde literatuur van dezelfde categorie, waarbij de combinatie voor de vakman voor de hand liggend wordt geacht

\*G\* lid van dezelfde octrooifamilie of overeenkomstige octrooipublicatie

Datum waarop het onderzoek naar de stand van de techniek van internationaal type werd voltooid

11 januari 2011

Verzenddatum van het rapport van het onderzoek naar de stand van de techniek van internationaal type

Naam en adres van de instantie

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De bevoegde ambtenaar

Gabriel, Christiaan

**ONDERZOEKSRAPPORT BETREFFENDE HET  
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Nummer van het verzoek om een onderzoek naar  
de stand van de techniek

NL 2004792

**C. (Vervolg). VAN BELANG GEACHTE DOCUMENTEN**

| Categorie ° | Geciteerde documenten, eventueel met aanduiding van speciaal van belang zijnde passages                         | Van belang voor<br>conclusie nr. |
|-------------|-----------------------------------------------------------------------------------------------------------------|----------------------------------|
| A           | EP 1 777 972 A1 (ERICSSON TELEFON AB L M<br>[SE]) 25 april 2007 (2007-04-25)<br>* alineas [0002] - [0009] *     | 1-5                              |
| A           | WO 2005/050575 A1 (LIMA ADERBAL FERNANDES<br>[BR]) 2 juni 2005 (2005-06-02)<br>* samenvatting *<br>* figuur 1 * | 1-5                              |

**ONDERZOEKSRAPPORT BETREFFENDE HET  
RESULTAAT VAN HET ONDERZOEK NAAR DE STAND  
VAN DE TECHNIEK VAN HET INTERNATIONALE TYPE**

Informatie over leden van dezelfde octrooifamilie

Nummer van het verzoek om een onderzoek naar  
de stand van de techniek

NL 2004792

| In het rapport<br>genoemd octrooigescrift | Datum van<br>publicatie | Overeenkomend(e)<br>geschrift(en) | Datum van<br>publicatie     |
|-------------------------------------------|-------------------------|-----------------------------------|-----------------------------|
| WO 2009098687                             | A2                      | 13-08-2009                        | GEEN                        |
| US 6081205                                | A                       | 27-06-2000                        | GEEN                        |
| EP 1777972                                | A1                      | 25-04-2007                        | CN 101283369 A 08-10-2008   |
|                                           |                         | WO 2007043946 A1 19-04-2007       |                             |
|                                           |                         | US 2008254817 A1 16-10-2008       |                             |
|                                           |                         | ZA 200803122 A 30-09-2009         |                             |
| WO 2005050575                             | A1                      | 02-06-2005                        | AU 2003283094 A1 08-06-2005 |



OCTROOICENTRUM NEDERLAND

WRITTEN OPINION

|                                                                       |                                            |                                |                              |
|-----------------------------------------------------------------------|--------------------------------------------|--------------------------------|------------------------------|
| File No.<br>SN54887                                                   | Filing date (day/month/year)<br>01.06.2010 | Priority date (day/month/year) | Application No.<br>NL2004792 |
| International Patent Classification (IPC)<br>INV. G06Q30/00 B60L11/18 |                                            |                                |                              |
| Applicant<br>Barneveld                                                |                                            |                                |                              |

This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☒ Box No. VII Certain defects in the application
- ☐ Box No. VIII Certain observations on the application

|  |                                 |
|--|---------------------------------|
|  | Examiner<br>Gabriel, Christiaan |
|--|---------------------------------|

## WRITTEN OPINION

Application number

NL2004792

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### Box No. I Basis of this opinion

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1. This opinion has been established on the basis of the latest set of claims filed before the start of the search.
2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the application and necessary to the claimed invention, this opinion has been established on the basis of:
  - a. type of material:
    - ☐ a sequence listing
    - ☐ table(s) related to the sequence listing
  - b. format of material:
    - ☐ on paper
    - ☐ in electronic form
  - c. time of filing/furnishing:
    - ☐ contained in the application as filed.
    - ☐ filed together with the application in electronic form.
    - ☐ furnished subsequently for the purposes of search.
3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.
4. Additional comments:

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### Box No. V Reasoned statement with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

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#### 1. Statement

|                          |             |     |
|--------------------------|-------------|-----|
| Novelty                  | Yes: Claims |     |
|                          | No: Claims  | 1-5 |
| Inventive step           | Yes: Claims |     |
|                          | No: Claims  | 1-5 |
| Industrial applicability | Yes: Claims | 1-5 |
|                          | No: Claims  |     |

#### 2. Citations and explanations

**see separate sheet**

## WRITTEN OPINION

Application number  
NL2004792

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**Box No. VII    Certain defects in the application**

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**see separate sheet**

**Re. Item V.**

1 The following documents are referenced:

- D1 WO 2009/098687 A2 (CELLOPARK TECHNOLOGIES LTD [IL]; LAVI ZEEV [IL]; SELOK GAD AZAR [IL]) 13 augustus 2009 (2009-08-13)
- D2 US 6 081 205 A (WILLIAMS DOUGLAS J [US]) 27 juni 2000 (2000-06-27)
- D3 EP 1 777 972 A1 (ERICSSON TELEFON AB L M [SE]) 25 april 2007 (2007-04-25)
- D4 WO 2005/050575 A1 (LIMA ADERBAL FERNANDES [BR]) 2 juni 2005 (2005-06-02)

2 The subject-matter of claim 1 is not novel, because D1 discloses: a "system for loading the batteries of an automotive vehicle (abstract), comprising at least one series of loading poles ("electric connection devices" in the abstract), wherein each one of said loading poles is provided with an electrical outlet socket that is designed to receive a complimentary socket of a power consumer, usually connecting to the batteries of the automotive vehicle ("suitable plug" on page 7, line 21), and wherein it includes monitoring means for registry of the amount of electrical energy that is supplied to the connected power consumer ("measuring the time, on page 11, lines 4-6"), an access facility for enabling the flow of electrical energy to the power consumer ("control centre" in the abstract; "45" in fig. 1; page 13, lines 10-11) that is connected to the electrical outlet socket (abstract; fig. 1; page 13, lines 10-11), and a payment facility ("control centre" in the abstract; "45" in fig. 1) that is linked to the monitoring means for payment of a monetary value that represents the amount of electrical energy that is supplied to the connected power consumer (page 11, lines 4-6)," [wherein] "the access facility is integrated in the payment facility (both activities are carried out by the "control centre" in the abstract; "45" in fig. 1) and that said payment facility is embodied with wireless communication means enabling a payer to initiate taking off electrical energy and pay for it by operating a mobile device (abstract; page 9, line 24 - page 11, line 10; page 12, line 19 - page 13, line 11) having a unique identification code ("CID" on page 9, line 29) and

arranged for communication with said wireless communication means (abstract; page 9, line 24 - page 11, line 10; page 12, line 19 - page 13, line 11) .

- 3 The subject-matter of the dependent claims 2-5 is also known from D1, so that the subject-matter of these claims also lacks novelty.
- 4 It is noted that the object of the present application (page 1, line 39 - page 2, line 2), to provide an easy to use manner of payment for electrically charging a vehicle is solved in exactly the same manner as disclosed in D1 using as such well known payment mechanisms (see D3, D4; the passages cited in the search report).
- 5 The object to avoid registration of a user (page 2, lines 3-6) is not achieved, since the user has to be a registered phone user. For instance, the presented solution will not function with prepaid phone accounts which have insufficient funds. Furthermore, the principle of billing a user on his phone account, so that a user does not have to register with a service provider, is known e.g. from D3.
- 6 Regarding the object of making calibration of loading poles less cumbersome and costly, it appears that the effort for calibrating is directly proportional to the amount of meters used, and a dedicated meter is required for each outlet to enable parallel operation. Details concerning the manner in which the monitoring is performed are lacking, so that it is not at present apparent how this object is achieved. For reasons of completeness, it is noted that document D2 discloses a centralised control of electricity outlets for charging electric vehicles, with centrally located power meters ("160", "162", "164" in fig. 4)

**Re. Item VII.**

- 1 The above-mentioned documents D1-D4 should be acknowledged in the application, and the 2-part form of claim 1 is not correct in respect of D1, since novelty is lacking.