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plaats	datum	ons kenmerk	uw kenmerk
Rijswijk	5 oktober 2006	217924/LS/id	

onderwerp

Europese octrooiaanvrage no. 04748722.8-2211
" SYSTEM AND METHOD FOR ELECTRONIC VOTING"

octrooien
merken
modellen
kwekersrechten
licenties

MEMORANDUM

Zonder begeleidend schrijven:

[X] Te uwer informatie gelieve u bijgaand aan te treffen een kopie van ons schrijven per fax d.d. 4-0-2006 aan de heer Maclaine Pont inzake bovengenoemde octrooiaanvrage

[ ] N.a.v. ons telefoongesprek

[ ] N.a.v. uw verzoek

[ ] Gaarne uw reactie

Met vriendelijke groeten,

Algemeen Octrooi- en Merkenbureau

Louw van der Steen

Bijlage: Kopie fax aan dhr. Maclaine Pont van 4 oktober 2006

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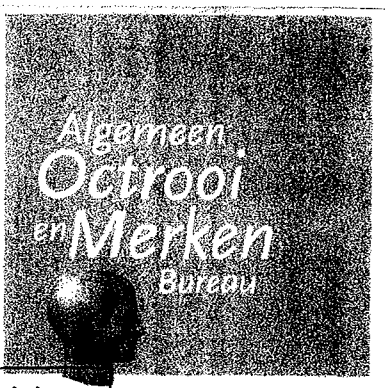
Beschermen van ideeën, het begin van succes



De heer P.G. Maclaine Pont
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Gaarne zien wij een ontvangstbevestiging van deze fax per kerende fax tegemoet.

***** FAXBERICHT *****
No.: 0514-605945
Dit faxbericht omvat 19 pagina's

plaats	datum	ons kenmerk	uw kenmerk
Rijswijk	4 oktober 2006	217924/LS/id	

onderwerp
Europese octrooiaanvrage no. 04748722.8-2211
" SYSTEM AND METHOD FOR ELECTRONIC VOTING"

Geachte heer Maclaine Pont,

Met betrekking tot bovengenoemde Europese octrooiaanvrage hebben wij een missive ontvangen van het Europees Octrooibureau; een afschrift van deze missive is bijgesloten.

In dit verband wordt opgemerkt dat deze missive, qua inhoud en strekking in hoofdzaak overeenkomt met het resultaat van het eerder door het Europees Octrooibureau als International Searching Authority uitgevoerde beoordeling, die als "written opinion" was toegevoegd aan het internationale nieuwheidsrapport voor de overeenkomstige internationale octrooiaanvrage WO 2005/004023 A1, die de basis vormt voor de huidge Europese octrooiaanvrage; kopieën van de in de missive aangehaalde octrooipublikaties zijn bijgesloten.

Hierbij wordt onder de aandacht gebracht dat wij de betreffende "written opinion" in de Internationale octrooiaanvrage hebben toegelicht en met ons commentaar hebben voorgelegd in onze brief van 18 februari 2005; een afschrift van deze brief is bijgesloten.

Naar aanleiding van de missive inzake bovengenoemde Europese octrooiaanvrage adviseren wij de octrooiaanvrage voort te zetten met gewijzigde claims; een voorstel voor gewijzigde claims is bijgesloten.

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BTW NL 800448595B01

Algemene voorwaarden, bij de K.v.K. Eindhoven gedeponeerd onder nr. 4938/98, worden op verzoek toegezonden.

Met betrekking tot de voorgestelde claims verwijzen wij naar het deel van het concept voor het in te dienen antwoord op de missive, waarin de wijzigingen in de claims zijn aangeduid en, voor zover van belang, toegelicht; een afschrift van het betreffende deel van het concept-antwoord is bijgesloten.

Een reactie met betrekking tot bovengenoemd voorstel zullen wij graag ontvangen vóór **11 October 2006**.

Indien er nog vragen zijn, dan zullen wij die graag beantwoorden.

Vriendelijke groet,

Algemeen Octrooi- en Merkenbureau

Louw van der Steen

Bijlagen
- Afschrift missive
- Afschrift brief d.d. 18 februari 2005
- Voorstel voor gewijzigde claims
- Deel concept-antwoord
- EP 1291826
- WO02/42974

Deel concept-antwoord
Claim amendments

Claim 1 has been drafted in the two-part form, starting from the paper by H. Robers, titled "Electronic elections employing DES smartcards", December 1998, IBM Student Chipcard Innovation Team, as the most pertinent prior art of record.

Present amended claim 1 comprises the subject matter of former claim 1 as originally filed.

Present claim 1 has been amended by indicating in the pre-characterizing part that the means for generating a reference election record for each individual voter comprising all potential virtual ballot forms for the individual voter, includes means for calculating a unique reference voter identity code for the individual voter from a unique code) for the election and the unique personal key of the voter, and means for calculating a unique reference subject identity code for each subject on the list of subjects to be elected by the voter from the unique subject codes and unique personal key of the voter, wherein the calculated unique reference voter identity code and the calculated unique reference subject identity codes form part of the potential virtual ballot forms of the reference election record of said voter.

In addition, it is indicated in the pre-characterizing part that the tool loaded in the polling equipment of the individual voter comprises means for calculating the unique voter identity code of the voter from the unique code for the election and the unique personal key communicated to the voter, means for calculating the unique subject identity code of the subject elected by the voter from the unique subject code of the subject elected by the voter and the unique personal key of the voter, and means for generating the virtual ballot form comprising the calculated unique voter identity code and the calculated unique subject identity code of the subject selected by the voter by using the polling equipment.

These amendments are based on the passage at page 24, line 12 - page 25, line 16 and the passage at page 27, lines 16 - 23 of the description as originally filed.

Further, it is indicated in the characterizing part, that the electronic voting system comprises means for validating votes from the virtual ballot forms having been received and collected before the closing of the election and having been verified for their presence in reference election records of the voters, wherein thevalidating means are arranged for validating votes from the collected and verified virtual ballot forms after the closing of the election in such way that if a set of two or more virtual ballot forms associated with an identical unique voter

identity code is collected, one virtual ballot form of the set is validated as one valid vote of the voter and the remaining virtual ballot forms of the set are marked as duplicate, provided the virtual ballot forms of the set are identical as to the subject elected by the voter, otherwise all virtual ballot forms of the set are marked invalid.

This amendment is based on the passage at page 30, line 10 - page 32, line 6 of the description as originally filed.

Present amended claim 2 comprises the subject matter of former claim 2 as originally filed.
Present claim 2 has been amended, such to present claim 2 as a dependent claim of present amended claim 1. Further, present claim 2 has been amended in the same sense as present amended claim 1.

Present amended independent claim 22 comprises the subject matter of former independent claim 22 as originally filed. Present independent claim 22 has been amended in the same sense as present amended claim 1.

Present amended claim 23 comprises the subject matter of former claim 23 as originally filed. Present claim 23 has been amended, such to present claim 23 as a dependent claim of present amended independent claim 22. Further, present claim 23 has been amended in the same sense as present amended claims 1 and 22.

It is noted that the features of the claims 1 - 42 have been provided with reference signs placed between parentheses to increase the intelligibility of the claims; the reference signs include the numbers in the figure and the values/codes/keys used throughout the description of the embodiment in the passage of page 24, line 4 - page 34, line 7 of the patent application as originally filed.

PROPOSAL FOR CLAIMS

1. Electronic voting system (1) for collecting and counting votes from individual voters using electronic polling equipment (20) in an election comprising a list (7) of subjects to be elected, from which list (7) one subject is to be elected by an individual voter (Vn), said votes being forwarded by means of a data network (2), said voting system (1) comprising:

- means (3) for generating a unique personal key (Kp) for each individual voter (Vn) entitled to said election, which unique personal key (Kp) is to be communicated to said individual voter (Vn);

- means (6) for generating a unique subject code for each subject (Cm) on said list (7) of subjects to be elected in said election;

- means (8) for generating a reference election record (RnPotVote) for each individual voter (Vn) comprising all potential virtual ballot forms (27) for said individual voter (Vn), including means (9) for calculating a unique reference voter identity code (RnPID) for said individual voter (Vn) from a unique code (EIID) for said election and the unique personal key (Kp) of said voter (Vn), and means (10) for calculating a unique reference subject identity code (RnCm) for each subject on said list (7) of subjects to be elected by said voter (Vn) from said unique subject codes (Cm) and said unique personal key (Kp) of said voter (Vn), wherein said calculated unique reference voter identity code (RnPID) and said calculated unique reference subject identity codes (RnCm) form part of the potential virtual ballot forms (27) of the reference election record (RnPotVote) of said voter (Vn).;

- means (12) for storing said reference election records (RnPotVote) for said individual voters (Vn);

- means (23) for loading a tool (21) in said polling equipment (20) of said individual voter (Vn), wherein said tool (21) comprises means (24) for calculating the unique voter identity code (VnPID) of said voter from said unique code (EIID) for said election and the unique personal key (Kp) communicated to said voter (Vn), means (25) for calculating the unique subject identity code (VnCm) of the subject elected by said voter (Vn) from the unique subject code (Cm) of said subject elected by said voter (Vn) and said unique personal key (Kp) of said voter (Vn), and

means for generating the virtual ballot form (27) comprising said calculated unique voter identity code (VnPID) and said calculated unique subject identity code (VnCm) of said subject selected by said voter by using said polling equipment (20);

- means (23) for forwarding said virtual ballot form (27) by said polling equipment (20) over said data network (2);

- means (13; 14) for receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20);

- means (15) for verifying each collected virtual ballot form (27) with respect to its presence in said reference election records of said voters;

- means (17) for counting votes, and

- means for establishing an election result,

characterized by means (16) for validating votes from said virtual ballot forms (27) having been received and collected before the closing of the election and having been verified for their presence in said reference election records (RnPotVote) of said voters (Vn), wherein said validating means (16) are arranged for validating votes from said collected and verified virtual ballot forms (27) after the closing of the election in such way that if a set of two or more virtual ballot forms (27) associated with an identical unique voter identity code (VnPID) is collected, one virtual ballot form (27) of said set is validated as one valid vote of said voter (Vn) and the remaining virtual ballot forms (27) of said set are marked as duplicate, provided said virtual ballot forms (27) of said set are identical as to the subject elected by said voter, otherwise all virtual ballot forms (27) of said set are marked invalid.

2. An electronic voting system (1) according to claim, said system being arranged for collecting and counting votes from individual voters (Vn) using electronic polling equipment (20) in an election comprising a list (7) of subjects to be elected, in which election an individual voter is to elect a combination of subjects from the subjects on the list (7) of subjects to be elected, said votes being forwarded by means of a data network, said system comprising:

- means (3) for generating a unique personal key (Kp) for each individual voter (Vn) entitled to said election, which unique personal key (Kp) is to be communicated to said individual voter (Vn);

- means for generating a unique reference subject combination code for each combination of subjects to be elected from the subjects on said list (7) of subjects to be elected in said election;

- means (8) for generating a reference election record (RnPotVote) for each individual voter (Vn) comprising all potential virtual ballot forms (27) for said individual voter (Vn), including means (9) for calculating a unique reference voter identity code (RnPID) for said individual voter (Vn) from a unique code (EllD) for said election and the unique personal key (Kp) of said voter (Vn), and means for calculating a unique reference subject combination identity code for each combination of subjects on said list (7) of subjects to be elected by said voter (Vn) in said election from the unique subject combination codes for said combinations of subjects and said unique personal key (Kp) of said voter (Vn), and wherein said calculated unique reference voter identity code (RnPID) and said calculated unique reference subject combination codes form part of the potential virtual ballot forms (27) of said reference election record (RnPotVote) for said individual voter (Vn)

- means (12) for storing said reference election records (RnPotVote) for said individual voters (Vn);

- means (23) for loading a tool (21) in said polling equipment (20) of said individual voter (Vn) wherein said tool (21) comprises means (24) for calculating a unique voter identity code (VnPID) for said voter (Vn) from said unique code (EllD) for said election and the unique personal key (Kp) of said voter (Vn), means for calculating the unique subject combination identity code for the combination of subjects elected by said voter (Vn) from the unique subject combination code for said combination of subjects elected from the subjects on the list (7) of subjects to be elected by said voter (Vn) and the unique personal key (Kp) of said voter (Vn), and means for generating the virtual ballot form (27) comprising said calculated unique voter identity code (VnPID) and said calculated unique subject combination identity code by using said polling equipment (20);

- means (23) for forwarding said virtual ballot form (27) by said polling equipment (20) over said data network (2);

- means (13; 14) for receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20);

- means (15) for verifying each collected virtual ballot form (27) with respect to its presence in said reference election records (RnPotVote) of said voters (Vn);

- means (17) for counting votes;

- means for establishing an election result, and

- means (16) for validating votes from said virtual ballot forms (27) having been received and collected before the closing of the election and having been verified for their presence in the in said reference election records (RnPotVote) of said voters (Vn), wherein said validating means (15) are arranged for validating votes from said collected and verified virtual ballot forms (27) after the closing of the election in such way that if a set of two or more virtual ballot forms (27) associated with an identical unique voter identity code (VnPID) is collected, one virtual ballot form (27) of said set is validated as one vote of said voter (Vn) and the remaining virtual ballot forms (27) of said set are marked as duplicate, provided said virtual ballot forms (27) of said set are identical as to said one combination of subjects elected by said voter (Vn), otherwise all virtual ballot forms (27) of said set are marked invalid.

3. Electronic voting system (1) according to claim 1 or 2, wherein said validating means (16) form part of said means (15) for verifying said collected virtual ballot forms (27).

4. Electronic voting system (1) according to claim 1 or 2, wherein said validating means (16) form part of said means (17) for counting said votes.

5. Electronic voting system (1) according to any of the previous claims, further comprising confirmation means (18) for generating a receipt (VotRecCon) indicating that a virtual ballot form (27) has been received from said polling equipment (20) of said voter (Vn) and means for delivering said receipt (Vot RecCon) comprising a unique receipt confirmation value (VotRecConCnt) in readable form at said polling equipment (20) of said voter (Vn).

6. Electronic voting system (1) according to any of the previous claims, further comprising means for publishing the list (34) of voters (Vn) entitled to said election, the list (7) of subjects to be elected in said election and said reference election records (RnPotVote) for said individual voters (Vn), enabling public inspection before the date of said election, and entry means for each individual voter (Vn) using said unique personal key (Kp) for inspection of the reference election record (RnPotVte) for said individual voter (Vn).

7. Electronic voting system (1) according to any of the previous claims, further comprising means for publishing the election-result comprising the record of the valid votes as awarded for said collected virtual ballot forms (27) after been submitted for verification and validation, enabling public inspection, and entry means

for each individual voter (Vn) using said unique personal key (Kp) for inspection of the account of said virtual ballot form (27) forwarded by said polling equipment (20) of said individual voter (Vn).

8. Electronic voting system (1) according to any of the previous claims, further comprising means for generating and storing a reference service identity code (ReSPID) for each individual voter (Vn) entitled to said election, which reference service identity code (ReSPID) is calculated from a fixed part of said unique personal key (Kp) of said voter (Vn) and information related to said election and means for keeping a status record of said voter (Vn) at said means (13; 14) for receiving and collecting said virtual ballot forms (27), wherein said status record is associated with said reference service identity code (ReSPID) of said voter (Vn).

9. Electronic voting system (1) according to claim 8, wherein said tool (21) to be loaded in said polling equipment (20) of said voter (Vn) is arranged for calculating said reference service identity code (ReSPID) from said fixed part of said unique personal key (Kp) of said voter (Vn) and said information related to said election and for forwarding said reference service identity code (ReSPID) to said means (13; 14) for receiving and collecting said virtual ballot forms (27).

10. Electronic voting system (1) according to any of the previous claims, further comprising communication means for communicating said unique personal key (Kp) to each individual voter (Vn) entitled to said election, said communication means comprises at least one of a group including means for electronically storing said unique personal key (Kp) in a chip card of said voter (Vn), data communication means for communicating said unique personal key (Kp) to said voter (Vn) by a data network such as the Internet or a fixed and/or mobile data communication network including a Short Message Service, and means for providing said unique personal key (Kp) n a human and/or machine readable form on a hard copy, such as a text message on paper, for communicating by mail to said voter (Vn).

11. Electronic voting system (1) according to claim 10, wherein said polling equipment (20) is arranged for operatively connecting same to data input means (29) comprising at least one of a group including a chip card reader, a keyboard, a mouse, a screen, a bar code reader and voice conversion means.

12. Electronic voting system (1) according to any of the previous claims, wherein said means (13; 14) for receiving and collecting virtual ballot forms (27) are arranged for receiving and collecting virtual ballot forms (27) other than forwarded

by said polling equipment (20) of a voter (Vn), such as physical ballot forms received by mail and converted into virtual ballot forms (27) by automatic ballot form reading and conversion means.

13. Electronic voting system (1) according to claim 12, wherein said means (15; 16) for verification and validating are arranged in such way that if a set of two or more virtual ballot forms associated with an identical unique voter identity code (VnPID) is collected and said virtual ballot forms (27) are collected from means of different kinds that have been appointed differing values of priority only the virtual ballot forms (27) collected from the means of the kind with the higher value of priority are submitted for verification and validation.

14. Electronic voting system (1) according to claim 13 wherein said means (15; 16) for verification and validation are arranged in such way that the means in which physical ballot forms received by mail are converted into virtual ballot forms (27) are appointed the lower value of priority.

15. Electronic voting system (1) according to any of the previous claims dependent on claim 1, wherein said means (10) for generating a unique reference subject identity code (RnCm) for each subject to be elected in said election, said means (9) for generating a unique reference voter identity code (RnPID) and said means (8) for generating a reference election record (RnPotVote) for each individual voter (Vn) entitled to said election comprise cryptographic generator and calculator means.

16. Electronic voting system (1) according to any of the previous claims dependent on claim 2, wherein said means for generating a unique reference subject combination identity code for each combination of subjects to be elected in said election, said means (9) for generating a unique reference voter identity code and said means (8) for generating a reference election record (RnPotVote) for each individual voter (Vn) entitled to said election comprise cryptographic generator and calculator means.

17. Electronic voting system (1) according to claim 15 or 16 wherein said cryptographic generator and calculator means are arranged for symmetric encryption.

18. Electronic voting system (1) according to any of the previous claims, wherein said means for presenting said list (7) of subjects from which one subject or one combination of subjects is to be elected by said voter (Vn) at said polling

equipment (20), said means (23) for loading said tool (21) in said polling equipment (20) of a voter (Vn), said means (13; 14) for receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20) and said confirmation means are supported by computer equipment comprising at least one computer server.

19. Electronic voting system (1) according to any of the previous claims, wherein the or each of said means (23) for loading said tool (21) in said polling equipment (20) of a voter(Vn), said means (13; 14) for receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20), said confirmation means (18) and said polling equipment (20) are arranged for providing secure data transmission over said data network.

20. Electronic voting system (1) according to any of the previous claims, wherein said means (3) for generating a unique personal key (Kp) for each individual voter (Vn), said means (9) for generating said unique reference voter identity code (RnPID) for each individual voter (Vn), means (10) for generating said unique reference identity code for each subject or combination of subjects to be elected in said election, said means (8) for generating said reference election record (RnPotVote) for each individual voter (Vn) entitled to said election, said means (15) for verifying the collected virtual ballot form (27) of said individual voter (Vn) with respect to its presence in said reference election record (RnPotVote) of said voter (Vn), said means (17) for counting votes of said voters (Vn), said means (16) for validating votes from said collected virtual ballot forms (27) and said means for establishing an election-result based on said counted votes are supported by computer equipment arranged to be operated under the supervision of an election authority.

21. Electronic voting system (1) according to any of the previous claims, wherein said polling equipment (20) comprises at least one of a group including a personal computer and fixed and mobile data communication equipment arranged for providing access to said data network.

22. Method for electronic voting, wherein votes from individual voters (Vn) using electronic polling equipment (20) are collected and counted in an election comprising a list (7) of subjects to be elected, from which list (7) one subject is to be elected by an individual voter (Vn), said votes being forwarded by means of a data network (2), said method comprising the steps of:

- generating a unique personal key (Kp) for each individual voter (Vn) entitled to said election;

- communicating said unique personal keys (Kp) to said individual voters (Vn);

- generating a unique subject code (Cm) for each subject on said list (7) of subjects to be elected in said election;

- generating a reference election record (RnPotVote) for each individual voter (Vn) comprising all potential virtual ballot forms (27) for said individual voter (Vn), wherein a unique reference voter identity code (RnPID) is calculated for said individual voter (Vn) from a unique code (EIID) for said election and the unique personal key (Kp) of said voter (Vn), a unique reference subject identity code (RnCm) for each subject on said list (7) of subjects to be elected by said voter (Vn) in said election is calculated from said unique subject codes (Cm) and said unique personal key (Kp) of said voter (Vn), said calculated unique reference voter identity code (RnPID) and said calculated unique reference subject identity codes (RnCm) forming part of the virtual ballot forms (27) in said reference election record (RnPotVote) for said individual voter (Vn);

- storing said reference election records (RnPotVote) for said individual voters (Vn);

- loading a tool (21) in said polling equipment (20) of a voter (Vn);

- electing one subject from said list (7) at said polling equipment (20) of said individual voter (Vn), by inputting said unique personal key (Kp) communicated to said voter (Vn) and said unique subject code (Cm) for said one elected subject into said polling equipment (20);

- generating a virtual ballot form (27) by using said tool (21) loaded into said polling equipment (20) of said voter (Vn), wherein a unique voter identity code (VnPID) is calculated from said unique code (EIID) of said election and said unique personal key (Kp) of said voter (Vn), wherein a unique subject identity code (VnCm) is calculated from said unique subject code (Cm) for said one subject elected by said voter (Vn) from said unique subject code (Cm) of said one subject elected and said unique personal key (Kp) of said voter (Vn) and wherein said calculated unique voter identity code (VnPID) and said calculated unique subject identity code (VnCm) of the subject elected by said voter (Vn) form part of said virtual ballot form (27);

- forwarding said virtual ballot (27) over said data network (2);

- receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20);

- verifying each collected virtual ballot form (27) with respect to its presence in said reference election records (RnPotVote) of said voters (Vn);

- counting votes, and

- establishing an election-result based on said counted votes, characterized by a step for validating votes from said virtual ballot forms (27) having been received and collected before the closing of the election, wherein said votes are validated from said collected virtual ballot forms (27) after the closing of the election in such way that, if a set of two or more virtual ballot forms (27) associated with an identical unique voter identity code (VnPID) is collected, one virtual ballot form (27) of said set is validated as one single valid vote of said voter (Vn) and the remaining virtual ballot forms (27) of said set are marked as duplicate, provided that said virtual ballot forms (27) of said set are identical as to said one subject elected by said voter (Vn), otherwise said virtual ballot forms (27) of said set are marked invalid.

23. Method for electronic voting, according to claim 22, wherein votes from individual voters (Vn) using electronic polling equipment (20) are collected and counted in an election comprising a list (7) of subjects to be elected, in which election an individual voter (Vn) is to elect a combination of subjects from the subjects on the list (7) of subjects to be elected, said votes being forwarded by means of a data network (2), said method comprises the steps of:

- generating a unique personal key (Kp) for each individual voter (Vn) entitled to said election;

- communicating said unique personal key (Kp) to each individual voter (Vn);

- generating a unique subject combination code for each combination of subjects on said list (7) of subjects to be elected in said election;

- generating a reference election record (RnPotVote) for each individual voter (Vn) comprising all potential virtual ballot forms (27) for said individual voter (Vn), wherein a unique voter identity code (RnPID) is calculated from a unique code (EIID) for said election and said unique personal key (Kp) of said voter (Vn), a unique subject combination identity code for each combination of

subjects on said list (7) of subjects to be elected by said voter (Vn) in said election is calculated from said unique subject combination code and said unique personal key (Kp) of said voter (Vn), said calculated reference voter identity code (RnPID) and said calculated reference subject combination identity codes forming part of said virtual ballot forms (27) in said reference election record (RnPotVote) for said individual voter (Vn);

- storing said reference election records (RnPotVote) for said individual voters (Vn);

- loading a tool (21) in said polling equipment (20) of a voter (Vn);

- electing one combination of subjects from said subjects on the list (7) of subjects to be elected at said polling equipment (20) of said individual voter (Vn), by inputting said unique personal key (Kp) of said voter (Vn) and said unique subject combination code for said one elected combination of subjects into said polling equipment (20);

- generating a virtual ballot form (27) on said polling equipment (20) using said tool (21) loaded into said polling equipment (20) of said voter (Vn), wherein a unique voter identity code (VnPID) is calculated from said unique code (EIID) for said election and said unique personal key (Kp) of said voter (Vn), wherein a unique subject combination identity code is calculated from said subject combination code for said one combination of subjects elected and said unique personal key (Kp) of said voter (Vn),and wherein said calculated unique voter identity code (VnPID) and the calculated unique subject combination identity code of the combination of subjects elected by said voter (Vn) form part of said virtual ballot form;

- forwarding said virtual ballot form (27) over said data network (2);

- receiving and collecting said virtual ballot form (27) forwarded by said polling equipment (20);

- verifying each collected virtual ballot form (27) with respect to its presence in said reference election records (RnPotVote) of said voters (Vn);

- counting votes, and

- establishing an election result based on said counted votes, further comprising

a step for validating votes from said virtual ballot forms (27) having been received and collected before the closing of the election and having been verified for their

presence in said reference election records (RnPotVote) of said voters (Vn), wherein the votes are validated after the closing of the election, in such way that, if a set of two or more virtual ballot forms (27) associated with an identical unique voter identity code (VnPID) is collected, one virtual ballot form (27) of said set is validated as one valid vote of said voter (Vn) and the remaining virtual ballot forms (27) of said set are marked duplicate, provided that said virtual ballot forms (27) of said set are identical as to said one combination of subjects elected by said voter (Vn), otherwise all virtual ballot forms (27) of said set are marked invalid.

24. Method for electronic voting according to any of the claims 22 - 23, further comprising the step of generating a receipt (VotRecCon) comprising a unique receipt confirmation value (VotRecConCnt) in readable form indicating that a virtual ballot form (27) forwarded over said data network (2) has been received, and wherein said confirmation receipt value (VotRecConCnt) is delivered at said polling equipment (20) of said voter (Vn).

25. Method for electronic voting according to any of the claims 22 - 24, further comprising the step of publishing the list (34) of voters entitled to said election, the list (7) of subjects to be elected in said election and said reference election records (RnPotVote) for said individual voters (Vn), enabling public inspection before the date of said election, and the step for providing entry means for each individual voter (Vn) using said unique personal key (Kp) for inspection of the reference election record (RnPotVote) for said individual voter (Vn).

26. Method for electronic voting according to any of the claims 22 - 25, further comprising the step of publishing the election result comprising the record of said valid votes as awarded for said collected virtual ballot forms (27) after been submitted for verification and validation, enabling public inspection and the step for providing entry means for each individual voter (Vn) using said unique personal key (Kp) for inspection of the record of said vote for said virtual ballot form (27) forwarded by said polling equipment (20) of said individual voter (Vn).

27. Method for electronic voting according to any of the claims 22 - 26, further comprising the steps of generating and storing a reference service identity code (ReSPID) for each individual voter (Vn) entitled to said election wherein said reference service identity code (ReSPID) is calculated from a fixed part of said unique personal key (Kp) of said voter (Vn) and information related to said election, and the step of keeping a status record for each individual voter (Vn) associated to

said reference service identity code (ReSPID).

28. Method for electronic voting according to any of the claims 22 - 27, further comprising the step of generating a reference service identity code (ReSPID) at said polling equipment (20) of said voter (Vn) wherein said service identity code (ReSPID) for said voter (Vn) is calculated from said first part of said unique voter identity code of said voter (Vn) and information related to said election using said tool (21) been loaded in said polling equipment (20) of said voter (Vn), and the step of forwarding said service identity code (ReSPID) to said means (13; 14) for receiving and collecting said virtual ballot form (27).

29. Method for electronic voting according to any of the claims 22 - 24, further comprising the step of receiving and collecting virtual ballot forms (27) other than forwarded by said polling equipment (20) of a voter (Vn), such as physical ballot forms forwarded by mail, and converting said physical ballot forms into virtual ballot forms (27) using automatic ballot form reading and conversion means.

30. Method for electronic voting according to claim 29, wherein the step of validating is arranged in such way that if two or more virtual ballot forms (27) associated with an identical unique voter identity code (VnPID) are collected and said virtual ballot forms (27) are collected from means of different kinds having been appointed differing values of priority, only the virtual ballot forms (27) collected from the means with the higher value of priority are submitted for validation.

31. Method for electronic voting according to claim 30, wherein the step of validating is arranged in such way that the means in which physical ballot forms received by mail are converted into virtual ballot forms (27) are appointed the lower value of priority.

32. Method for electronic voting according to any of the claims 22 - 31, wherein said unique reference identity code for each subject or each combination of subjects to be elected, said unique reference voter identity code (RnPID) and said reference election record (RNPotVote) for each individual voter (Vn) entitled to said election are cryptographically generated and calculated.

33. Method for electronic voting according to claim 32, wherein said unique reference identity codes and reference election records (RnPotVote) are generated and calculated for symmetric encryption.

34. Method for electronic voting according to any of the claims 22 - 33, wherein said steps of generating said unique personal key (Kp) for each individual

voter (Vn) entitled to said election, said unique reference voter identity code (RnPID) for each individual voter (Vn), said unique reference identity code for each subject or each combination of subjects to be elected, said reference election record (RnPotVote) for each individual voter (Vn) entitled to said election, and said steps of verifying said collected virtual ballot form (27) of an individual voter (Vn) with respect to its presence in said reference election record (RnPotVote) of said voter (Vn), validating said collected virtual ballot forms (27), counting votes and establishing said election-result are performed under the supervision of an election authority.

35. Method for electronic voting according to any of the claims 22 - 34, wherein said step of communicating said unique personal key (Kp) to each individual voter (Vn) entitled to said election comprises at least one of a group of steps including electronically storing said unique personal key (Kp) in a chip card of said voter (Vn), communicating said unique personal key (Kp) to said voter (Vn) by a data network such as the Internet or a fixed and/or mobile data communication network including a Short Message Service, and providing said unique personal key (Kp) in a human and/or machine readable form on a hard copy, such as a text message on paper, for communicating by mail to said voter (Vn).

36. Method for electronic voting according claim 35, wherein said hard copy is suitable to be cast as a physical ballot form comprising said subjects or said combinations of subjects to be elected by said voter (Vn).

37. Method for electronic voting according to any of the claims 22 - 36, wherein a reserve-list of a limited number of unique reserve keys is generated and said reference election record is generated to comprise virtual ballot forms (27) for said number of unique reserve keys, and wherein a reserve key of said reserve-list is issued to a voter who applies for a fresh unique key replacing said unique personal key (Kp) initially appointed to said voter, wherein said reserve key is appointed to said voter after said initially appointed unique personal key (Kp) and said corresponding reference election record (RnPotVote) are withdrawn, and wherein said issue of said reserve key and said withdrawal of said initially appointed unique personal key (Kp) are taken into account for the verification of the validity of collected virtual ballot forms (27).

38. Method for electronic voting according to any of the claims 22 - 37, wherein said polling equipment (20) comprises at least one of a group including a personal computer and fixed and mobile data communication equipment arranged

for providing access to said data network (2) using browser software, and wherein said tool (21) is loaded automatically into said polling equipment (20) from said data network (2).

39. Method for electronic voting according to claim 38, wherein said data network (2) comprises the Internet and said polling equipment (20) comprises a personal computer operatively connected to the Internet, wherein said tool (21) is loaded into said personal computer by means of a Java applet included in a web-page to be selected by a voter (Vn) for participating in said election.

40. Method for electronic voting according to claim 39, wherein said polling equipment (20) comprises GSM communication equipment having a SIM-card and wherein said tool (21) is loaded in said SIM-card of said communication equipment for participating in said election by a voter (Vn) using said communication equipment.

41. Computer program product, comprising program code means stored on a computer readable medium, for performing the or part of the steps according to any of claims 22 - 40, if loaded into an internal working memory of said computer and operated by said computer.

42. Computer program product, comprising program code means stored on a computer readable medium, arranged as a tool for loading into a computer program running on a computer controlled polling equipment (20) for performing the steps according to any of the claims 22, 28 and 37 - 40 if loaded into an internal working memory of said computer and operated by said computer.

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Betreft: Uw Internationale (PCT) octrooiaanvrage PCT/NL2004/00496 ten name van Hoogheemraadschap van Rijnland en P.G. Maclaine Pont "System and method for electronic voting".

Geachte heer Bouwman,

In uw bovengenoemde Internationale octrooiaanvrage ontvingen wij het nieuwheidsrapport met een eerste beoordeling van de octrooieerbaarheid van de aanvrage door de nieuwheidsonderzoeker van het Europees Octrooibureau. Een afschrift van het nieuwheidsrapport en de daarin genoemde documenten vindt u bijgesloten. Tevens ontvangt u een afschrift van de aanvrage zoals gepubliceerd onder het nummer WO 2005/00423 A1 en onze reactie aan de heer Maclaine Pont inzake de bezwaren van de nieuwheidsonderzoeker.

Tevens sluit ik onze nota bij voor de met het bestuderen en rapporteren van het nieuwheidsonderzoek gemoeide kosten, inclusief kopieer- en verzendkosten.

Met vriendelijke groeten,

Algemeen Octrooi- en Merkenbureau

J. Dohmen

Bijlagen:
- afschrift aanvrage zoals gepubliceerd onder nummer WO 2005/00423 A1;
- afschrift internationaal nieuwheidsrapport;
- afschriften geciteerde documenten (4);
- afschrift brief aan de heer Maclaine Pont;
- nota.