PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

| SUBMISSION TYPE: | NEW ASSIGNMENT |
|-----------------------|----------------|
| NATURE OF CONVEYANCE: | ASSIGNMENT |

CONVEYING PARTY DATA

| Name | Execution Date |
|-----------------|----------------|
| Jens BACHMANN | 08/31/2010 |
| Shinkichi IKEDA | 08/05/2010 |
| Kilian WENIGER | 09/02/2010 |
| Takashi ARAMAKI | 08/04/2010 |

RECEIVING PARTY DATA

| Name: | Panasonic Corporation | |
|-----------------|------------------------------------------|--|
| Street Address: | et Address: 1006 Oaza Kadoma, Kadoma-shi | |
| City: | Osaka-shi, Osaka-fu | |
| State/Country: | JAPAN | |
| Postal Code: | 571-8501 | |

PROPERTY NUMBERS Total: 1

| Property Type | Number |
|---------------------|----------|
| Application Number: | 12812007 |

CORRESPONDENCE DATA

Fax Number: (202)659-1559

Correspondence will be sent via US Mail when the fax attempt is unsuccessful.

Phone: 2026596960

Email: jledbetter@dickinsonwright.com

Correspondent Name: James E Ledbetter
Address Line 1: 1875 Eye Street, NW

Address Line 2: SUITE 1200

Address Line 4: Washington, DISTRICT OF COLUMBIA 20006

| ATTORNEY DOCKET NUMBER: | 007725-10109 |
|-------------------------|--------------------|
| NAME OF SUBMITTER: | James E. Ledbetter |

Total Attachments: 2

PATENT REEL: 024956 FRAME: 0981 JP \$40.00 12812007

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PATENT REEL: 024956 FRAME: 0982

MEI Form -2.4; (Sep. 2007)

| Panasonic Ref*: | Application Serial No. 12/8/2.007 |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------|
| German Firm Name: Gronecker Kinkeldey Stockmair & Schwanhausser | German Firm Rof: PAS6154US-DK137903ver |
| US Firm Name: DW | US Firm Ref; 007725-10109 |
| ASSIG | MENT |
| WHEREAS, the undersigned has (have) keyented the invention entitled; | |
| Box 1 | |
| Tills of Invention: NON-3GPF TO 3GPP NETWORK HANDOVER OP | rimiza 'rions |
| 1. For use when signing Declaration prior to filing t | U.S. palent, application (check only one box below) |
| (a) for which an application for U.S. patent has been executed | by the uindersigned concurrently herewith, or |
| (b) I for which an application for U.S. patent has been executed (if Declaration & Automorphism standards the same day, elect (a) and mater to among in the blank if it | on the following date(s): To Decimplos was signed before this dangement, erter the dairty on which you signed the Decimplos |
| (c)O for which an international Application has been filed as: for the PCF-US repeated error; check only (c) and enter PCT application member is the night) | PCT Application No. PCT/EP2009/000070 and, |
| 2. For use when signing Declaration | on after bling U.S. patent application |
| (d) \square for which an application for U.S. patent has been filed on: | Application Filing Date July 7, 2010 and, |
| WHEREAS, Panasonic Corporation of 1006 Oaza Kadoma, Karrepresentatives and assigns (hereinalite designated as "Assignee(s")) said Invention and In and In any Latters Patentics that may be expected. | dome-shi. Osaka 571-8501, JAPAN Its/their holis, successors, legal is/lare destrous of acquiring the entire right, title, and interest in and to |

representatives and assigns (hereinalter designated as "Assignee(s)" is/are desirous of acquiring the ontire right, title, and interest in and to said invention and it mad to any Lotters Patentis) that may be granted therefor.

NOW, THEREFORE, for good and valuable consideration, the receipt and srufficiency of which are hereby acknowledged and intended to be legally bound hereby, the undersigned, by these presents, does sail, seeign and transfer unto said Assignee(s) the entire and exclusive right, title and interest in and to; (i) said invention, in the United States of America, its tarifortes, dependencies and possessions (horeinafter designated as the United States) and in all countries foreign to the United States; and (ii) this patent application and any and all related patent application(s) disclosing said invention, including provisionals, non-provisionals, conversions, obtains and applications, continuations, continuations, continuations, continuations, continuations, and applications in the United States and all countries foreign to the United States (hereinafter designated as "Related Applications"), along with all rights of priority created by this patent application under any treaty relating thereto; and (iii) any and all Letters Patentia); including all renewals, extensions, releases and reexamination certificates which may be granted therefore, and all rights to see for past and luture infiningement thereforender, in the United States and in all countries foreign to the United States for the full term or terms thereof.

The undersigned agree(s) to execute all papers necessary in connection with this applications of the International Convention for Protection of industrial Property or similar agreements, all papers necessary in connection with the Assignee(s) in every way possible in obtaining and producing evidence and perform any set which may be increased by interference which may be decired converning this application or any and all Related Applications or Letters Patentia) increfore, and to t

the undersigned if this Assignment had not been made.

The undersigned hereby suthorize(s) and request(s) the Commissioner of Platents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(e) and hereby coverants that the undersigned has (have) full right to convey the entire interest horizon assigned, and that the undersigned has (have) not executed, and will not execute, any assignment, sale, agreement or encumbrances in conflict herewith.

The undersigned hereby does self, assign and transfer unto said Assignmen(s) the full and exclusive authority for revoking power of attorney(s) executed by the undersigned in connection with this application and for appointing a new power of attorney in place freedof.

The undersigned hereby grant(s) the Assignee(s) and the appointed U.S. patent attorneys and agents the power to insert on this assignment any further identification which may be necessary or destrable in order to comply with the rules of the U.S. Petent Office for recordation of this document.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within the United States

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

| | (e) First Name, Last Name | (f) Signature | (g) Date signed |
|-----|---------------------------|---------------|-------------------|
| (1) | Jens BACHMANN | Deus In- | 8/3-1/201 |
| (2) | Shinkichi (KEDA | ien lar | Aug. 5, 2010 |
| (3) | Kilian WENIGER | | Month, Date, Year |
| (4) | Takashi ARAMAKI | 7 | Monin, vere, year |

cCheck if additional paper(s) is/are attached. Total of _1__ pages are submitted,

REEL: 024956 FRAME: 0983

| Panasonic Ref*; | Application Serial No. | 12/812.007 |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------------------|
| German Firm Name: Gruncoker Kinkeldev Stockmajr & Schwanhausser | German Firm Ref: | PA56154US-DK137909 ver |
| US Firm Name: DW | US Firm Rofi | 007725-10109 |
| ASSIGN | MENT | |
| WHEREAS, the undersigned has (have) invented the invention entitled: | | · · · · · · · · · · · · · · · · · · · |
| Title of Invention: NON-3GPF TO 3GPP NETWORK HANDOVER OPTI | | |
| 1. For use when signing Deducation prior is filing U.S | | |
| (a)O for which an application for U.S. patent has been executed by | y the undersigned concurre | intly herewith, or |
| (b)C) for which an application for U.S. patent has been executed or (Continuition & designment for life and in some disc clock (U) and make the critical in high block if the | A the following detailed: | |
| | 1 | 7 |
| (c)O for which an International Application has been filed as: you the PCPUS narroad entry, check onto (c) and enter PCP opplication number in the right) | PCT Application No. | PCT/EP2009/000070 and, |
| (c) Or which an International Application has been filed as: for the FCPUS national entry, that had not follow man PCP qualitation number in the night 2. For use when significan Declaration: | | PC 172P2009/000070 and, |

WHEREAS. Penasonic Conteration of 1995 Caza Kadoma, Kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma-kadoma

the and interest in and to said invention, this application and any and as related Applications or Letters Patent(s) meretors, and to tostily in any legal proceeding relating thereto and in support thereof, for the bonefit of Assignee(s), and also to execute separate essignments in connection with such applications as the Assignee(s) may deem necessary or expedient. The undersigned agree(s) to perform all affirmative acts which may be necessary to obtain a grant of a valid United States and any foreign patent(s) to the Assignee(s) and to vost all rights hereby conveyed to the Assignee(s) as fully and entirely as the same would neve been held by

patent(s) to the Assignmen(s) and to vest all rights hereby conveyed to the Assignme(s) as fully and entirely as the same would neve been held by the undersigned if this Assignment had not been made.

The undersigned hereby authorizets and request(s) the Commissioner of Patents, and officials of all foreign countries, whose duty is to issue patents, to issue any and all Letters Patent(s) resulting from said application or any and all Related Applications thereof to said Assignee(s) and hereby coverants that the undersigned has (have) full right to convey the entire interest herein assigned, and that the undersigned has (have) not executed, any assignment sale, agreement or encumbrances in conflict herevith. The undersigned hereby does sell, assign and transfer onto said Assignments or encumbrances in conflict herevith.

The undersigned hereby grant(s) the Assignments and the appointed U.S. patent attempts and agents the power to insert on this assignment any further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this

The property metapy gramma managements and the opposition of all property and agents one power to make our unit exagnition and further identification which may be necessary or desirable in order to comply with the rules of the U.S. Patent Office for recordation of this

document.

The undersigned hereby agree(s) that the above obligations shall apply to the undersigned both individually and collectively.

The undersigned hereby agree(s) that this Assignment shall be construed in accordance with the law of the appropriate jurisdiction within

IN WITNESS WHEREOF, executed by the undersigned on the date(s) following the undersigned name(s) and signature(s).

| | (c) First Name, Last Name | (f) Signature | (a) Date sinced |
|-----|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 17} | Jens BACHMANN | The state of the s | (g) Date signed |
| 2) | Shinkichi IKEDA | | Morith, Dela, Year |
| 3) | Killari WENIGER | Kolum W | 09/02/20 |
| 4) | Takashi ARAMAKi | | Month, Outs, Vasr |

::Check if additional paper(s) is/ore attached. Total of __1___ pages are submitted.

RECORDED: 09/08/2010

PATENT REEL: 024956 FRAME: 0984