



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	ISSUE DATE	PATENT NO.	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576,079	10/20/2020	10812646	075425-0083	3325

20277 7590 09/30/2020

MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

ISSUE NOTIFICATION

The projected patent number and issue date are specified above.

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The Patent Term Adjustment is 0 day(s). Any patent to issue from the above-identified application will include an indication of the adjustment on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Application Assistance Unit (AAU) of the Office of Data Management (ODM) at (571)-272-4200.

APPLICANT(s) (Please see PAIR WEB site <http://pair.uspto.gov> for additional applicants):

Nobuo MASUOKA, Kyoto, JAPAN;
MAXELL, LTD., Kyoto, JAPAN;
Yasunobu HASHIMOTO, Kyoto, JAPAN;

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The USA offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to encourage and facilitate business investment. To learn more about why the USA is the best country in the world to develop technology, manufacture products, and grow your business, visit SelectUSA.gov.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

20277 7590 06/17/2020
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

(Typed or printed name)
(Signature)
(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083	3325

TITLE OF INVENTION: PORTABLE TERMINAL APPARATUS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1000	\$0.00	\$0.00	\$1000	09/17/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
HEIBER, SHANTELL LAKETA	2645	455-420000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1 McDermott Will & Emery LLP

2

3

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

MAXELL, LTD.

Kyoto, JAPAN

Please check the appropriate assignee category or categories (will not be printed on the patent): ☐ Individual ☒ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☒ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☒ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☒ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. 50-0417

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature /Tomoki Tanida/

Date September 16, 2020

Typed or printed name Tomoki Tanida

Registration No. 60,453

Electronic Patent Application Fee Transmittal

Application Number:	16576079			
Filing Date:	19-Sep-2019			
Title of Invention:	PORTABLE TERMINAL APPARATUS			
First Named Inventor/Applicant Name:	Nobuo MASUOKA			
Filer:	Tomoki Tanida/Renell Feimster			
Attorney Docket Number:	075425-0083			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				
UTILITY APPL ISSUE FEE	1501	1	1000	1000

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1000

Electronic Acknowledgement Receipt

EFS ID:	40575527
Application Number:	16576079
International Application Number:	
Confirmation Number:	3325
Title of Invention:	PORTABLE TERMINAL APPARATUS
First Named Inventor/Applicant Name:	Nobuo MASUOKA
Customer Number:	20277
Filer:	Tomoki Tanida/Renell Feimster
Filer Authorized By:	Tomoki Tanida
Attorney Docket Number:	075425-0083
Receipt Date:	16-SEP-2020
Filing Date:	19-SEP-2019
Time Stamp:	14:42:52
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 1000
RAM confirmation Number	E20209FE43199781
Deposit Account	500417
Authorized User	Renell Feimster

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.21 (Miscellaneous fees and charges)

37 CFR 1.20 (Post Issuance fees)

IPR2025-01316; Samsung

37 CFR 1.19 (Document supply fees)
37 CFR 1.17 (Patent application and reexamination processing fees)
37 CFR 1.16 (National application filing, search, and examination fees)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Issue Fee Payment (PTO-85B)	Issue_Fee_Transmittal.pdf	177374	no	1
			07e504d6804b603a95c01796fd9591500a2ee618		

Warnings:

Information:

2	Fee Worksheet (SB06)	fee-info.pdf	30229	no	2
			d0cdf992310fe048d1035860615975334e4f0d40		

Warnings:

Information:

Total Files Size (in bytes):	207603
-------------------------------------	--------

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

20277 7590 06/17/2020
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

EXAMINER

HEIBER, SHANTELL LAKETA

ART UNIT

PAPER NUMBER

2645

DATE MAILED: 06/17/2020

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083	3325

TITLE OF INVENTION: PORTABLE TERMINAL APPARATUS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1000	\$0.00	\$0.00	\$1000	09/17/2020

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the ENTITY STATUS shown above. If the ENTITY STATUS is shown as SMALL or MICRO, verify whether entitlement to that entity status still applies.

If the ENTITY STATUS is the same as shown above, pay the TOTAL FEE(S) DUE shown above.

If the ENTITY STATUS is changed from that shown above, on PART B - FEE(S) TRANSMITTAL, complete section number 5 titled "Change in Entity Status (from status indicated above)".

For purposes of this notice, small entity fees are 1/2 the amount of undiscounted fees, and micro entity fees are 1/2 the amount of small entity fees.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Maintenance fees are due in utility patents issuing on applications filed on or after Dec. 12, 1980. It is patentee's responsibility to ensure timely payment of maintenance fees when due. More information is available at www.uspto.gov/PatentMaintenanceFees.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), by mail or fax, or via EFS-Web.

By mail, send to: Mail Stop ISSUE FEE
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450

By fax, send to: (571)-273-2885

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

20277 7590 06/17/2020
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being transmitted to the USPTO via EFS-Web or by facsimile to (571) 273-2885, on the date below.

	(Typed or printed name)
	(Signature)
	(Date)

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576.079	09/19/2019	Nobuo MASUOKA	075425-0083	3325

TITLE OF INVENTION: PORTABLE TERMINAL APPARATUS

APPLN. TYPE	ENTITY STATUS	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	UNDISCOUNTED	\$1000	\$0.00	\$0.00	\$1000	09/17/2020

EXAMINER	ART UNIT	CLASS-SUBCLASS
HEIBER, SHANTELL LAKETA	2645	455-420000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.

☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-09 or more recent) attached. **Use of a Customer Number is required.**

2. For printing on the patent front page, list

(1) The names of up to 3 registered patent attorneys or agents OR, alternatively,

1 _____

(2) The name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

2 _____

3 _____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document must have been previously recorded, or filed for recordation, as set forth in 37 CFR 3.11 and 37 CFR 3.81(a). Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent) : ☐ Individual ☐ Corporation or other private group entity ☐ Government

4a. Fees submitted: ☐ Issue Fee ☐ Publication Fee (if required) ☐ Advance Order - # of Copies _____

4b. Method of Payment: (Please first reapply any previously paid fee shown above)

☐ Electronic Payment via EFS-Web ☐ Enclosed check ☐ Non-electronic payment by credit card (Attach form PTO-2038)

☐ The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment to Deposit Account No. _____

5. Change in Entity Status (from status indicated above)

☐ Applicant certifying micro entity status. See 37 CFR 1.29

☐ Applicant asserting small entity status. See 37 CFR 1.27

☐ Applicant changing to regular undiscounted fee status.

NOTE: Absent a valid certification of Micro Entity Status (see forms PTO/SB/15A and 15B), issue fee payment in the micro entity amount will not be accepted at the risk of application abandonment.

NOTE: If the application was previously under micro entity status, checking this box will be taken to be a notification of loss of entitlement to micro entity status.

NOTE: Checking this box will be taken to be a notification of loss of entitlement to small or micro entity status, as applicable.

NOTE: This form must be signed in accordance with 37 CFR 1.31 and 1.33. See 37 CFR 1.4 for signature requirements and certifications.

Authorized Signature _____

Date _____

Typed or printed name _____

Registration No. _____



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083	3325
20277 7590 06/17/2020				
MCDERMOTT WILL & EMERY LLP				
THE MCDERMOTT BUILDING				
500 NORTH CAPITAL STREET, N.W.				
WASHINGTON, DC 20001				
EXAMINER				
HEIBER, SHANTELL LAKETA				
ART UNIT		PAPER NUMBER		
2645				

DATE MAILED: 06/17/2020

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (Applications filed on or after May 29, 2000)

The Office has discontinued providing a Patent Term Adjustment (PTA) calculation with the Notice of Allowance.

Section 1(h)(2) of the AIA Technical Corrections Act amended 35 U.S.C. 154(b)(3)(B)(i) to eliminate the requirement that the Office provide a patent term adjustment determination with the notice of allowance. See Revisions to Patent Term Adjustment, 78 Fed. Reg. 19416, 19417 (Apr. 1, 2013). Therefore, the Office is no longer providing an initial patent term adjustment determination with the notice of allowance. The Office will continue to provide a patent term adjustment determination with the Issue Notification Letter that is mailed to applicant approximately three weeks prior to the issue date of the patent, and will include the patent term adjustment on the patent. Any request for reconsideration of the patent term adjustment determination (or reinstatement of patent term adjustment) should follow the process outlined in 37 CFR 1.705.

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

OMB Clearance and PRA Burden Statement for PTOL-85 Part B

The Paperwork Reduction Act (PRA) of 1995 requires Federal agencies to obtain Office of Management and Budget approval before requesting most types of information from the public. When OMB approves an agency request to collect information from the public, OMB (i) provides a valid OMB Control Number and expiration date for the agency to display on the instrument that will be used to collect the information and (ii) requires the agency to inform the public about the OMB Control Number's legal significance in accordance with 5 CFR 1320.5(b).

The information collected by PTOL-85 Part B is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450. Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Notice of Allowability	Application No. 16/576,079	Applicant(s) MASUOKA et al.	
	Examiner SHANTELL L HEIBER	Art Unit 2645	AIA (FITF) Status Yes

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 5/29/2020.
☐ A declaration(s)/affidavit(s) under **37 CFR 1.130(b)** was/were filed on _____.

2. ☐ An election was made by the applicant in response to a restriction requirement set forth during the interview on _____; the restriction requirement and election have been incorporated into this action.

3. ☒ The allowed claim(s) is/are 5-29. As a result of the allowed claim(s), you may be eligible to benefit from the **Patent Prosecution Highway** program at a participating intellectual property office for the corresponding application. For more information, please see http://www.uspto.gov/patents/init_events/pph/index.jsp or send an inquiry to PPHfeedback@uspto.gov.

4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

Certified copies:

a) ☐ All b) ☐ Some *c) ☐ None of the:

1. ☐ Certified copies of the priority documents have been received.

2. ☐ Certified copies of the priority documents have been received in Application No. _____.

3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)	5. ☐ Examiner's Amendment/Comment
2. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____.	6. ☒ Examiner's Statement of Reasons for Allowance
3. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material _____.	7. ☐ Other _____.
4. ☐ Interview Summary (PTO-413), Paper No./Mail Date. _____.	

/SHANTELL L HEIBER/ Primary Examiner, Art Unit 2645	
--	--

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Allowable Subject Matter

2. Claims 5-29 are allowed.
3. The following is an examiner's statement of reasons for allowance:

Prior art fails to disclose ***"...a first display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on the display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a first condition, wherein the first condition is met when a control screen for remotely and wirelessly controlling an external device via the wireless communication interface is not displayed on the display before the portable terminal apparatus enters a sleep state; a second display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on the display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a second condition, wherein the second condition is met when the wireless communication interface is unable to communicate with the external device and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state; and a third display mode during which a control icon and a first screen to be moved to a screen for performing authentication to execute an unlock***

operation are displayed on the display when the portable terminal apparatus wakes up from a sleep state based on a third condition, wherein the third condition is met when the wireless communication interface is able to communicate with the external device and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state, wherein the control screen is used to execute control operations on the external device based on the input received by the operation input interface, and wherein, when the control icon is selected in the third display mode without the unlock operation, the wireless communication interface transmits a remote control signal corresponding to the selected control icon to the external device.” as required in independent claims 5 and 18.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTELL HEIBER whose telephone number is (571)272-0886. The examiner can normally be reached on M-F 9am-5pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Addy can be reached on 571-272-7795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SHANTELL L HEIBER/
Primary Examiner, Art Unit 2645
June 8, 2020

Issue Classification 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.	
	Examiner SHANTELL L HEIBER	Art Unit 2645	

CPC						
Symbol					Type	Version
H04M	/	1	/	72533	F	2013-01-01
G08C	/	17	/	02	I	2013-01-01
G08C	/	2201	/	12	A	2013-01-01
G08C	/	2201	/	93	A	2013-01-01
G08C	/	2201	/	30	A	2013-01-01

CPC Combination Sets					
Symbol				Type	Set
/	/	/	/		

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 25	
/SHANTELL L HEIBER/ Primary Examiner, Art Unit 2645 (Primary Examiner) _____ (Date) 08 June 2020		O.G. Print Claim(s) 5	O.G. Print Figure 4a-4d

Issue Classification 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.
	Examiner SHANTELL L HEIBER	Art Unit 2645

INTERNATIONAL CLASSIFICATION			
CLAIMED			
H04M	/	3	/ 00
NON-CLAIMED			
/		/	

US ORIGINAL CLASSIFICATION	
CLASS	SUBCLASS
455	420

CROSS REFERENCES(S)						
CLASS	SUBCLASS (ONE SUBCLASS PER BLOCK)					

NONE		Total Claims Allowed:	
(Assistant Examiner)	(Date)	25	
/SHANTELL L HEIBER/ Primary Examiner, Art Unit 2645	08 June 2020	O.G. Print Claim(s)	O.G. Print Figure
(Primary Examiner)	(Date)	5	4a-4d

<i>Issue Classification</i> 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.
	Examiner SHANTELL L HEIBER	Art Unit 2645

☐ Claims renumbered in the same order as presented by applicant
 ☐ CPA
 ☐ T.D.
 ☐ R.1.47

CLAIMS															
Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original	Final	Original
	1	6	10	15	19	24	28								
	2	7	11	16	20	25	29								
	3	8	12	17	21										
	4	9	13	18	22										
1	5	10	14	19	23										
2	6	11	15	20	24										
3	7	12	16	21	25										
4	8	13	17	22	26										
5	9	14	18	23	27										

NONE (Assistant Examiner) _____ (Date) _____		Total Claims Allowed: 25	
/SHANTELL L HEIBER/ Primary Examiner, Art Unit 2645 (Primary Examiner) _____ (Date) 08 June 2020		O.G. Print Claim(s) 5	O.G. Print Figure 4a-4d

<i>Search Notes</i> 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.
	Examiner SHANTELL L HEIBER	Art Unit 2645

CPC - Searched*		
Symbol	Date	Examiner
H04M1/72533 ; H04M2250/02	11/22/2019	SLH
H04N2005/4425	11/22/2019	SLH
H04W12/001 ; H04W12/02 ; H04W12/06 ; H04W12/0602 ; H04W12/0608 ; H04W12/12	11/22/2019	SLH
H04M1/72533 ; H04M2250/02	06/08/2020	SLH
H04N2005/4425	06/08/2020	SLH
H04W12/001 ; H04W12/02 ; H04W12/06 ; H04W12/0602 ; H04W12/0608 ; H04W12/12	06/08/2020	SLH

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
See East Search report	11/22/2019	SLH
See East Search report	06/08/2020	SLH

--	--

<i>Search Notes</i> 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.
	Examiner SHANTELL L HEIBER	Art Unit 2645

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
	See East Search report	11/22/2019	SLH
	See East Search report	06/08/2020	SLH

--	--

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L1	123	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/06/08 18:29
L2	183	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2020/06/08 18:29
L3	44,428	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2020/06/08 18:30
L4	505	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2020/06/08 18:30
L5	8	L3 and L4	US-PGPUB; USPAT	OR	ON	2020/06/08 18:30
L6	6,586	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2020/06/08 18:31
L7	2,238	device with lock with (remote near control)	US-PGPUB; USPAT	OR	ON	2020/06/08 18:31
L8	33	L6 and L7	US-PGPUB; USPAT	OR	ON	2020/06/08 18:31
L9	2,201	(authenticat\$3 security) with ((control remote) near2 (icon button))	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2020/06/08 18:31
L10	183	L3 and L9	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2020/06/08 18:31
L11	1	L4 and L9	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2020/06/08 18:32
L12	21	L6 and L9	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2020/06/08 18:32
L13	124	(authenticat\$3 security) with ((control remote) near2 (icon button)) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2020/06/08 18:33

L14	276	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2020/06/08 18:34
L15	9	L6 and L14	US-PGPUB; USPAT	OR	ON	2020/06/08 18:34
S1	2	("20170214784").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2018/04/18 21:36
S2	5	("20070290876" "20120113061" "20120154108" "20140019994" "20140109024").PN.	US-PGPUB; USPAT	OR	ON	2018/04/18 21:54
S3	1,894	device with lock with (remote near control)	US-PGPUB; USPAT	OR	ON	2018/04/19 21:27
S4	2	device with lock with (remote near control) with display with sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:27
S5	2	(device with lock with (remote near control) with display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:28
S6	5	(device same lock same (remote near control) same display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:29
S7	3	S6 not S5	US-PGPUB; USPAT	OR	ON	2018/04/19 21:29
S8	33	(device with lock with button with display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 22:18
S9	1	sleep with state with (presence sens\$3) with (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:42
S10	6	sleep same state same (presence sens\$3) same (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:43
S11	0	((sleep near state) with (lock near screen)) same (button near display\$3) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:53
S12	0	((sleep near state) same (lock near screen)) same (button near display\$3) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:54
S13	0	((sleep near state) same (lock near screen)) same (display\$3 with (button application icon image)) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:54
S14	0	(sleep same (lock near screen)) same (display\$3 with (button application icon image)) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:55

S15	5	(sleep same (lock near screen)) same (display\$3 with (button application icon image)) same connect\$3	US-PGPUB; USPAT	OR	ON	2018/04/19 22:55
S16	36	sleep with display with lock with button	US-PGPUB; USPAT	OR	ON	2018/04/19 23:06
S17	1	"8756511".pn.	US-PGPUB; USPAT	OR	ON	2018/04/19 23:18
S18	1	"8630623".pn.	US-PGPUB; USPAT	OR	ON	2018/04/19 23:32
S19	1	"20120154108".pn.	US-PGPUB; USPAT	OR	ON	2018/04/23 22:41
S20	2	("20170214784").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2018/12/19 09:12
S21	5,869	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2018/12/19 10:26
S22	103	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/19 10:27
S23	143	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/19 10:27
S24	48	(lock near2 button) with (wake adj up)	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:31
S25	2	"20140019994".pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:52
S26	2	"8630623".pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:53
S27	1	(lock near2 button) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:15
S28	0	((authenticat\$3 security) near2 button) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:15
S29	16	(authenticat\$3 security) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:16

S30	5,869	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2018/12/19 17:16
S31	0	S30 and S29	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:16
S35	105	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/04/18 10:17
S36	146	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/04/18 10:17
S38	6,042	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 16:07
S39	38,656	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 17:12
S40	432	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 17:22
S41	5	S39 and S40	US-PGPUB; USPAT	OR	ON	2019/04/18 17:22
S42	256	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/04/18 22:56
S43	38,656	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S44	1	S42 and S43	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S45	432	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S46	0	S42 and S45	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S47	8	S42 and 455/\$.ccls.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S48	482	((lock security) near button) same (control near button)	US-PGPUB; USPAT	OR	ON	2019/04/18 23:06
S49	0	S45 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:07
S50	11	S43 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:07
S51	440	S48 not S42	US-PGPUB; USPAT	OR	ON	2019/04/18 23:10
S52	3	S47 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:10

S53	22	S48 and 455/\$.ccls.	US-PGPUB; USPAT	OR	ON	2019/04/18 23:11
S54	39,665	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S55	461	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S56	14	S54 and S55	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S57	114	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S58	368	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	EPO; JPO; DERWENT	OR	OFF	2019/08/22 18:43
S59	114	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S60	157	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S61	20	sleep same state same (presence sens\$3) same (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2019/08/22 18:53
S62	50	(device with lock with button with display) same sleep	US-PGPUB; USPAT	OR	ON	2019/08/22 18:53
S63	264	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54
S65	0	S55 and S63	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54
S66	8	455/\$.ccls. and S63	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54
S67	2	("20190230211").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/08/22 19:01
S68	1	("2014/0019994").URPN.	USPAT	OR	OFF	2019/08/22 19:14
S69	3	((lock security) near button) same (remote near control) same (sleep near state)	US-PGPUB; USPAT	OR	ON	2019/08/22 20:33
S71	2	"20180199279".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/08/23 12:19

S72	39,665	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S73	264	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S74	1	S72 and S73	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S75	1	"10462278".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/11/21 10:12
S76	3	"10298737".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/11/21 10:12
S77	116	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/11/21 23:06
S78	163	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/11/21 23:06
S80	41,057	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S81	477	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S82	14	S80 and S81	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S83	6,339	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:06
S84	2,161	device with lock with (remote near control)	US-PGPUB; USPAT	OR	ON	2019/11/22 14:06
S85	32	S83 and S84	US-PGPUB; USPAT	OR	ON	2019/11/22 14:07
S86	268	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/11/22 14:07
S87	8	S83 and S86	US-PGPUB; USPAT	OR	ON	2019/11/22 14:08
S88	0	S81 and S86	US-PGPUB; USPAT	OR	ON	2019/11/22 14:08
S89	1	S80 and S86	US-PGPUB; USPAT	OR	ON	2019/11/22 14:08
S90	113	(authenticat\$3 security) with ((control remote) near2 (icon button)) with application	US-PGPUB; USPAT;	OR	ON	2019/11/22 14:10

			USOCR; DERWENT			
S91	2,093	(authenticat\$3 security) with ((control remote) near2 (icon button))	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:10
S92	171	S80 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:10
S93	1	S81 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:13
S94	19	S83 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:13
S95	8	("20070290876" "20120113061" "20120154108" "20140019994" "20140109024" "8630623" "8756511" "9922347").PN.	US-PGPUB; USPAT	OR	ON	2019/11/22 21:42
S96	1	"20150248651".pn.	US-PGPUB; USPAT	OR	ON	2019/11/26 12:36

EAST Search History (Interference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S32	0	(display and mode and lock and release and button and remote and control and sleep and state and acess and point and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S33	0	(display and mode and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S34	1	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S37	1	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2019/04/18 10:18
S70	3	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:42

S79	3	(display and lock and release and button and remote and control and sleep and state and screen and mode).clm.	US-PGPUB; USPAT	OR	ON	2019/11/21 23:07
-----	---	---	-----------------	----	----	------------------

6/8/2020 6:38:17 PM

C:\Users\sheiber\Documents\EAST\Workspaces\15326365.wsp

Doc Code: DIST.E.FILE Document Description: Electronic Terminal Disclaimer - Filed		PTO/SB/26 U.S. Patent and Trademark Office Department of Commerce
Electronic Petition Request	TERMINAL DISCLAIMER TO OBVIATE A DOUBLE PATENTING REJECTION OVER A "PRIOR" PATENT	
Application Number	16576079	
Filing Date	19-Sep-2019	
First Named Inventor	Nobuo MASUOKA	
Attorney Docket Number	075425-0083	
Title of Invention	PORTABLE TERMINAL APPARATUS	
☒ Filing of terminal disclaimer does not obviate requirement for response under 37 CFR 1.111 to outstanding Office Action ☒ This electronic Terminal Disclaimer is not being used for a Joint Research Agreement.		
Owner	Percent Interest	
MAXELL, LTD.	100%	
The owner(s) with percent interest listed above in the instant application hereby disclaims, except as provided below, the terminal part of the statutory term of any patent granted on the instant application which would extend beyond the expiration date of the full statutory term of prior patent number(s) 10298737 10462278 as the term of said prior patent is presently shortened by any terminal disclaimer. The owner hereby agrees that any patent so granted on the instant application shall be enforceable only for and during such period that it and the prior patent are commonly owned. This agreement runs with any patent granted on the instant application and is binding upon the grantee, its successors or assigns. In making the above disclaimer, the owner does not disclaim the terminal part of the term of any patent granted on the instant application that would extend to the expiration date of the full statutory term of the prior patent, "as the term of said prior patent is presently shortened by any terminal disclaimer," in the event that said prior patent later: - expires for failure to pay a maintenance fee; - is held unenforceable; - is found invalid by a court of competent jurisdiction; - is statutorily disclaimed in whole or terminally disclaimed under 37 CFR 1.321; - has all claims canceled by a reexamination certificate; - is reissued; or - is in any manner terminated prior to the expiration of its full statutory term as presently shortened by any terminal disclaimer.		

☒ Terminal disclaimer fee under 37 CFR 1.20(d) is included with Electronic Terminal Disclaimer request.

☐ I certify, in accordance with 37 CFR 1.4(d)(4), that the terminal disclaimer fee under 37 CFR 1.20(d) required for this terminal disclaimer has already been paid in the above-identified application.

Applicant claims the following fee status:

☐ Small Entity

☐ Micro Entity

☒ Regular Undiscounted

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

THIS PORTION MUST BE COMPLETED BY THE SIGNATORY OR SIGNATORIES

I certify, in accordance with 37 CFR 1.4(d)(4) that I am:

☒ An attorney or agent registered to practice before the Patent and Trademark Office who is of record in this application

Registration Number 60453

☐ A sole inventor

☐ A joint inventor; I certify that I am authorized to sign this submission on behalf of all of the inventors as evidenced by the power of attorney in the application

☐ A joint inventor; all of whom are signing this request

Signature	/Tomoki Tanida/
Name	Tomoki Tanida

*Statement under 37 CFR 3.73(b) is required if terminal disclaimer is signed by the assignee (owner).
Form PTO/SB/96 may be used for making this certification. See MPEP § 324.

Electronic Patent Application Fee Transmittal

Application Number:	16576079			
Filing Date:	19-Sep-2019			
Title of Invention:	PORTABLE TERMINAL APPARATUS			
First Named Inventor/Applicant Name:	Nobuo MASUOKA			
Filer:	Tomoki Tanida/Lisa Grant			
Attorney Docket Number:	075425-0083			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
STATUTORY OR TERMINAL DISCLAIMER	1814	1	160	160
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				160

Doc Code: DISQ.E.FILE

Document Description: Electronic Terminal Disclaimer – Approved

Application No.: 16576079

Filing Date: 19-Sep-2019

Applicant/Patent under Reexamination: MASUOKA

Electronic Terminal Disclaimer filed on May 29, 2020

☒ APPROVED

This patent is subject to a terminal disclaimer

☐ DISAPPROVED

Approved/Disapproved by: Electronic Terminal Disclaimer automatically approved by EFS-Web

U.S. Patent and Trademark Office

Electronic Acknowledgement Receipt

EFS ID:	39570997
Application Number:	16576079
International Application Number:	
Confirmation Number:	3325
Title of Invention:	PORTABLE TERMINAL APPARATUS
First Named Inventor/Applicant Name:	Nobuo MASUOKA
Customer Number:	20277
Filer:	Tomoki Tanida/Lisa Grant
Filer Authorized By:	Tomoki Tanida
Attorney Docket Number:	075425-0083
Receipt Date:	29-MAY-2020
Filing Date:	19-SEP-2019
Time Stamp:	10:22:51
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 160
RAM confirmation Number	E20205SA22484915
Deposit Account	500417
Authorized User	Lisa Grant

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.21 (Miscellaneous fees and charges)

IPR2025-01316; Samsung

Ex. 1002 - Page 33

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Terminal Disclaimer-Filed (Electronic)	eTerminal-Disclaimer.pdf	33512	no	2
			9baeae600d46d1db169f60838eecd2761b6533a		
Warnings:					
Information:					
2	Fee Worksheet (SB06)	fee-info.pdf	30595	no	2
			449dbc2c6ffd0b9d54e6176d2f857ee5b0dd75f8		
Warnings:					
Information:					
Total Files Size (in bytes):			64107		
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	:	Customer Number: 20277
Nobuo MASUOKA et al.	:	
	:	
Application No.: 16/576,079	:	Confirmation No.: 3325
	:	
Filed: September 19, 2019	:	Art Unit: 2645
	:	
For: PORTABLE TERMINAL APPARATUS	:	Examiner: Heiber, Shantell Laketa

AMENDMENT IN RESPONSE TO NON-FINAL OFFICE ACTION UNDER 37 C.F.R. § 1.111

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

In response to the Office Action dated November 29, 2019 having a three-month shortened statutory period for response set to expire February 29, 2020, and three-month extension of time up to and including May 29, 2020 being filed concurrently herewith, Applicant respectfully requests reconsideration of the above-identified application in view of the following amendments and remarks.

Amendments to the Claims begin on page 2 of this paper.

Remarks begin on page 8 of this paper.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

PETITION FOR EXTENSION OF TIME UNDER 37 CFR 1.136(a)		Docket Number (Optional) 075425-0083																														
Application Number 16/576,079	Filed 2019-09-19																															
For PORTABLE TERMINAL APPARATUS																																
Art Unit 2645	Examiner Heiber, Shantell Laketa																															
This is a request under the provisions of 37 CFR 1.136(a) to extend the period for filing a reply in the above-identified application. The requested extension and fee are as follows (check time period desired and enter the appropriate fee below): <table style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 40%;"></th> <th style="width: 15%; text-align: center;"><u>Fee</u></th> <th style="width: 15%; text-align: center;"><u>Small Entity Fee</u></th> <th style="width: 15%; text-align: center;"><u>Micro Entity Fee</u></th> <th style="width: 15%;"></th> </tr> </thead> <tbody> <tr> <td>☐ One month (37 CFR 1.17(a)(1))</td> <td style="text-align: center;">\$200</td> <td style="text-align: center;">\$100</td> <td style="text-align: center;">\$50</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td>☐ Two months (37 CFR 1.17(a)(2))</td> <td style="text-align: center;">\$600</td> <td style="text-align: center;">\$300</td> <td style="text-align: center;">\$150</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td>☒ Three months (37 CFR 1.17(a)(3))</td> <td style="text-align: center;">\$1,400</td> <td style="text-align: center;">\$700</td> <td style="text-align: center;">\$350</td> <td style="text-align: center;">\$ 1400</td> </tr> <tr> <td>☐ Four months (37 CFR 1.17(a)(4))</td> <td style="text-align: center;">\$2,200</td> <td style="text-align: center;">\$1,100</td> <td style="text-align: center;">\$550</td> <td style="text-align: center;">\$ _____</td> </tr> <tr> <td>☐ Five months (37 CFR 1.17(a)(5))</td> <td style="text-align: center;">\$3,000</td> <td style="text-align: center;">\$1,500</td> <td style="text-align: center;">\$750</td> <td style="text-align: center;">\$ _____</td> </tr> </tbody> </table> ☐ Applicant asserts small entity status. See 37 CFR 1.27. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously. ☐ A check in the amount of the fee is enclosed. ☐ Payment by credit card. Form PTO-2038 is attached. ☒ The Director has already been authorized to charge fees in this application to a Deposit Account. ☒ The Director is hereby authorized to charge any fees which may be required, or credit any overpayment, to Deposit Account Number <u>50-0417</u>. ☐ Payment made via EFS-Web. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. I am the ☐ applicant. ☒ attorney or agent of record. Registration number <u>60453</u>. ☐ attorney or agent acting under 37 CFR 1.34. Registration number _____. <u>/Tomoki Tanida/</u> <u>May 29, 2020</u> Signature Date <u>Tomoki Tanida</u> <u>(202) 756-8196</u> Typed or printed name Telephone Number NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. Submit multiple forms if more than one signature is required, see below*.				<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>		☐ One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____	☐ Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____	☒ Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ 1400	☐ Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____	☐ Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____
	<u>Fee</u>	<u>Small Entity Fee</u>	<u>Micro Entity Fee</u>																													
☐ One month (37 CFR 1.17(a)(1))	\$200	\$100	\$50	\$ _____																												
☐ Two months (37 CFR 1.17(a)(2))	\$600	\$300	\$150	\$ _____																												
☒ Three months (37 CFR 1.17(a)(3))	\$1,400	\$700	\$350	\$ 1400																												
☐ Four months (37 CFR 1.17(a)(4))	\$2,200	\$1,100	\$550	\$ _____																												
☐ Five months (37 CFR 1.17(a)(5))	\$3,000	\$1,500	\$750	\$ _____																												

☒ * Total of 1 forms are submitted.

This collection of information is required by 37 CFR 1.136(a). The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 6 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Privacy Act Statement

The **Privacy Act of 1974 (P.L. 93-579)** requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether disclosure of these records is required by the Freedom of Information Act.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspection or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:	16576079			
Filing Date:	19-Sep-2019			
Title of Invention:	PORTABLE TERMINAL APPARATUS			
First Named Inventor/Applicant Name:	Nobuo MASUOKA			
Filer:	Tomoki Tanida/Lisa Grant			
Attorney Docket Number:	075425-0083			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
Pages:				
Claims:				
CLAIMS IN EXCESS OF 20	1202	5	100	500
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				
Post-Allowance-and-Post-Issuance:				

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Extension-of-Time:				
Extension - 3 months with \$0 paid	1253	1	1400	1400
Miscellaneous:				
Total in USD (\$)				1900

Electronic Acknowledgement Receipt

EFS ID:	39570784
Application Number:	16576079
International Application Number:	
Confirmation Number:	3325
Title of Invention:	PORTABLE TERMINAL APPARATUS
First Named Inventor/Applicant Name:	Nobuo MASUOKA
Customer Number:	20277
Filer:	Tomoki Tanida/Lisa Grant
Filer Authorized By:	Tomoki Tanida
Attorney Docket Number:	075425-0083
Receipt Date:	29-MAY-2020
Filing Date:	19-SEP-2019
Time Stamp:	09:39:01
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 1900
RAM confirmation Number	E202055039494481
Deposit Account	500417
Authorized User	Lisa Grant

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.21 (Miscellaneous fees and charges)

IPR2025-01316; Samsung

Ex. 1002 - Page 40

File Listing:					
Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1		079Amendment.pdf	52057	yes	9
			4d9b6b8544676667bd13ae084b400150ecb8de0d		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Applicant Arguments/Remarks Made in an Amendment		8	9	
	Claims		2	7	
	Amendment/Req. Reconsideration-After Non-Final Reject		1	1	
Warnings:					
Information:					
2	Extension of Time	079EXT.pdf	129001	no	2
			3ab495d85a796338083bea1f1b559656ceda0458		
Warnings:					
Information:					
3	Fee Worksheet (SB06)	fee-info.pdf	32514	no	2
			fa8d705c0f73fe100070f5f296b667fd42d2de83		
Warnings:					
Information:					
Total Files Size (in bytes):			213572		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

REMARKS

Introduction

Claims 1–4 were pending at the time of the Office Action dated November 29, 2019. Applicant acknowledges, with appreciation, the Examiner’s indication that claims 1–4 would be allowable if the double patenting rejection discussed in the present Office Action were overcome.

By this response, claims 1–4 have been cancelled, without prejudice, reserving right to prosecution in a continuation/divisional application, and claim 5–29 have been newly added herein. Care has been exercised to avoid the introduction of new matter. Support for the present Amendment should be apparent throughout the originally filed disclosure as, for example, the depicted embodiments and related discussion thereof in the written description of the specification. Claims 5–29 are now pending in this application, of which claims 5 and 18 are independent.

Entry of various comments regarding the claims and/or the art, in the Office Action, should not be construed as any acquiescence or agreement by Applicant with the stated reasoning, regardless of whether or not these remarks specifically address any particular comment from the Office Action.

Reconsideration of this application for allowance of all pending claims is hereby respectfully requested in view of the amendments to the claims and following remarks.

Double Patenting

1. Claims 1–4 were rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 10,298,737.
2. Claims 1 and 3 were rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1 and 12 of U.S. Patent No. 10,462,278.

Although claims 1–4 have been canceled, Applicant submits a terminal disclaimer in order to eliminate potential double patenting rejections based on the above patents. Submission of the disclaimer, however, should not be construed as any form of agreement or acquiescence by Applicant to the effect that the present claims are not patentably distinguishable over the claims of the earlier patent.

Applicant respectfully solicits favorable consideration of new claims 5–29.

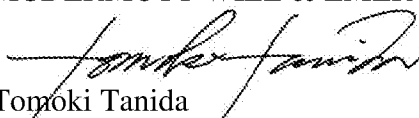
Conclusion

In view of the above amendments and remarks, Applicant submits that this application should be allowed and the case passed to issue. If there are any questions regarding this Amendment or the application in general, a telephone call to the undersigned would be appreciated to expedite the prosecution of the application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP



Tomoki Tanida
Registration No. 60,453

500 North Capitol Street, N.W.
Washington, DC 20001
Phone: (202) 756-8196
Facsimile: (202) 756-8087
Date: May 29, 2020

**Please recognize our Customer No. 20277 as
our correspondence address.**

AMENDMENT TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1.-4. (Cancelled)

5. (New) A portable terminal apparatus comprising:

a display;

an operation input interface configured to receive an input corresponding to a user operation;

a wireless communication interface configured to perform communication over a wireless local area network; and

a processor programmed to control state transitions of the portable terminal apparatus to and from a sleep state and further performing a plurality of display modes, the plurality of display modes including:

a first display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on the display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a first condition, wherein the first condition is met when a control screen for remotely and wirelessly controlling an external device via the wireless communication interface is not displayed on the display before the portable terminal apparatus enters a sleep state;

a second display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on the display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a second condition, wherein the second condition is met when the wireless communication interface is unable to communicate with the external device and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state; and

a third display mode during which a control icon and a first screen to be moved to a screen for performing authentication to execute an unlock operation are displayed on the display when the portable terminal apparatus wakes up from a sleep state based on a third

condition, wherein the third condition is met when the wireless communication interface is able to communicate with the external device and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state,

wherein the control screen is used to execute control operations on the external device based on the input received by the operation input interface, and

wherein, when the control icon is selected in the third display mode without the unlock operation, the wireless communication interface transmits a remote control signal corresponding to the selected control icon to the external device.

6. (New) The portable terminal apparatus according to claim 5,
wherein the portable terminal apparatus is a smartphone and the external device is used for display of a video content.

7. (New) The portable terminal apparatus according to claim 5,
wherein the control screen includes a plurality of selectable control icons that enable a user to execute control operations on content being displayed under the control of the external device, the control operations including an operation for selection of content to be displayed.

8. (New) The portable terminal apparatus according to claim 5, further comprising:
a GPS receiver;
a sensor determining a movement state of the portable terminal apparatus;
an infrared sensor;
a gyro sensor determining angular movement of the portable terminal apparatus; and
a physical button executing a predetermined operation when a user pushes the physical button.

9. (New) The portable terminal apparatus according to claim 5, further comprising:
a plurality of physical buttons,
wherein the simultaneous pushing of the plurality of physical buttons results in a single predetermined operation being executed by the portable terminal apparatus.

10. (New) The portable terminal apparatus according to claim 5,
wherein the unlock operation in the first display mode, the second display mode, and the third display mode is initiated by sliding the first screen.
11. (New) The portable terminal apparatus according to claim 5,
wherein in the third display mode the control icon and the first screen are displayed simultaneously on the display and are arranged such that at least a portion of the control icon is displayed in a top half of the display screen.
12. (New) The portable terminal apparatus according to claim 5,
wherein the wireless communication interface is configured to communicate with the external device by implementing an encryption scheme.
13. (New) The portable terminal apparatus according to claim 12,
wherein the encryption scheme is WEP (Wired Equivalent Privacy).
14. (New) The portable terminal apparatus according to claim 12,
wherein the encryption scheme is WPA (WiFi Protected Access).
15. (New) The portable terminal apparatus according to claim 12,
wherein the encryption scheme is WPA (WiFi Protected Access) 2.
16. (New) The portable terminal apparatus according to claim 5,
wherein the portable terminal apparatus has a function not to display the control icon even in the third display mode.
17. (New) The portable terminal apparatus according to claim 5,
wherein the portable terminal apparatus is configured to allow a user to select whether to display the control icon even in the third display mode.
18. (New) A method executed by a portable terminal apparatus, the method comprising:

receiving, by an operation input interface, an input corresponding to a user operation;
performing wireless communication over a wireless local area network;
controlling state transitions of the portable terminal apparatus to or from a sleep state;
performing a plurality of display modes, the plurality of display modes including:

a first display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on a display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a first condition, wherein the first condition is met when a control screen for remotely and wirelessly controlling an external device via performing the wireless communication is not displayed on the display before the portable terminal apparatus enters a sleep state;

a second display mode during which a first screen to be moved to a screen for performing authentication to execute an unlock operation is displayed on the display without display of a control icon when the portable terminal apparatus wakes up from a sleep state based on a second condition, wherein the second condition is met when the portable terminal apparatus is unable to communicate with the external device via performing the wireless communication and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state; and

a third display mode during which a control icon and a first screen to be moved to a screen for performing authentication to execute an unlock operation are displayed on the display when the portable terminal apparatus wakes up from a sleep state based on a third condition, wherein the third condition is met when the portable terminal apparatus is able to communicate with the external device via performing the wireless communication and the control screen is displayed on the display before the portable terminal apparatus enters a sleep state, wherein the control screen is used to execute control operations on the external device based on the input received by the operation input interface; and

transmitting via wireless communication a remote control signal corresponding to the selected control icon to the external device when the control icon is selected in the third display mode without unlock operation.

19. (New) The method according to claim 18,

wherein the control screen includes a plurality of selectable control icons that enable a user to execute control operations on content being displayed under control of the external device, the control operations including an operation for selection of content to be displayed.

20. (New) The method according to claim 18, further comprising:
determining a position of the portable terminal apparatus;
determining a movement state of the portable terminal apparatus;
determining angular movement of the portable terminal apparatus; and
executing a predetermined operation when a user pushes a physical button.
21. (New) The method according to claim 18, further comprising:
executing a single predetermined operation when a user simultaneously pushes a plurality of physical buttons on the portable terminal apparatus.
22. (New) The method according to claim 18,
wherein the unlock operation in the first display mode, the second display mode, and the third display mode is initiated by sliding the first screen.
23. (New) The method according to claim 18,
wherein in the third display mode the control icon and the first screen are displayed simultaneously on the display and are arranged such that at least a portion of the control icon is displayed in a top half of the display screen.
24. (New) The method according to claim 18,
wherein performing the wireless communication with the external device includes implementing an encryption scheme.
25. (New) The method according to claim 24,
wherein the encryption scheme is WEP (Wired Equivalent Privacy).
26. (New) The method according to claim 24,

wherein the encryption scheme is WPA (WiFi Protected Access).

27. (New) The method according to claim 24,
wherein the encryption scheme is WPA (WiFi Protected Access) 2.
28. (New) The method according to claim 18,
wherein the portable terminal apparatus has a function not to display the control icon
even in the third display mode.
29. (New) The method according to claim 18,
wherein the portable terminal apparatus is configured to allow a user to select whether to
display the control icon even in the third display mode.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083

CONFIRMATION NO. 3325

PUBLICATION NOTICE



OC000000115028885

20277
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

Title:PORTABLE TERMINAL APPARATUS

Publication No.US-2020-0068062-A1

Publication Date:02/27/2020

NOTICE OF PUBLICATION OF APPLICATION

The above-identified application will be electronically published as a patent application publication pursuant to 37 CFR 1.211, et seq. The patent application publication number and publication date are set forth above.

The publication may be accessed through the USPTO's publically available Searchable Databases via the Internet at www.uspto.gov. The direct link to access the publication is currently <http://www.uspto.gov/patft/>.

The publication process established by the Office does not provide for mailing a copy of the publication to applicant. A copy of the publication may be obtained from the Office upon payment of the appropriate fee set forth in 37 CFR 1.19(a)(1). Orders for copies of patent application publications are handled by the USPTO's Public Records Division. The Public Records Division can be reached by telephone at (571) 272-3150 or (800) 972-6382, by facsimile at (571) 273-3250, by mail addressed to the United States Patent and Trademark Office, Public Records Division, Alexandria, VA 22313-1450 or via the Internet.

In addition, information on the status of the application, including the mailing date of Office actions and the dates of receipt of correspondence filed in the Office, may also be accessed via the Internet through the Patent Electronic Business Center at www.uspto.gov using the public side of the Patent Application Information and Retrieval (PAIR) system. The direct link to access this status information is currently <https://portal.uspto.gov/pair/PublicPair>. Prior to publication, such status information is confidential and may only be obtained by applicant using the private side of PAIR.

Further assistance in electronically accessing the publication, or about PAIR, is available by calling the Patent Electronic Business Center at 1-866-217-9197.

Office of Data Management, Application Assistance Unit (571) 272-4000, or (571) 272-4200, or 1-888-786-0101



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083	3325

20277 7590 11/29/2019
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

EXAMINER

HEIBER, SHANTELL LAKETA

ART UNIT	PAPER NUMBER
----------	--------------

2645

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

11/29/2019

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

ipdocketmwe@mwe.com

DETAILED ACTION

Notice of Pre-AIA or AIA Status

1. The present application, filed on or after March 16, 2013, is being examined under the first inventor to file provisions of the AIA.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the “right to exclude” granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on nonstatutory double patenting provided the reference application or patent either is shown to be commonly owned with the examined application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement. See MPEP § 717.02 for applications subject to examination under the first inventor to file

provisions of the AIA as explained in MPEP § 2159. See MPEP §§ 706.02(l)(1) - 706.02(l)(3) for applications not subject to examination under the first inventor to file provisions of the AIA. A terminal disclaimer must be signed in compliance with 37 CFR 1.321(b).

The USPTO Internet website contains terminal disclaimer forms which may be used. Please visit www.uspto.gov/patent/patents-forms. The filing date of the application in which the form is filed determines what form (e.g., PTO/SB/25, PTO/SB/26, PTO/AIA/25, or PTO/AIA/26) should be used. A web-based eTerminal Disclaimer may be filled out completely online using web-screens. An eTerminal Disclaimer that meets all requirements is auto-processed and approved immediately upon submission. For more information about eTerminal Disclaimers, refer to www.uspto.gov/patents/process/file/efs/guidance/eTD-info-I.jsp.

3. Claims 1-4 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1-4 of U.S. Patent No. 10,298,737. Although the claims at issue are not identical, they are not patentably distinct from each other because the claims basically say the same thing. The only difference in the claims is the current application state “external device” and the patent state “predetermined access point”.

4. Claims 1 and 3 are rejected on the ground of nonstatutory double patenting as being unpatentable over claims 1 and 12 of U.S. Patent No. 10,462,278. Although the claims at issue are not identical, they are not patentably distinct from each other because the claims basically say the same thing. The current applicant state “lock release button” versus the patent state “lock release icon”. Also, the current application state “remote control button” versus the patent state “control icon”.

Allowable Subject Matter

5. Upon overcoming the rejection above, Claims 1-4 are allowed.
6. The following is an examiner's statement of reasons for allowance:

Prior art such as Cho discloses a device and method for controlling a display of a portable terminal are provided. The device includes a display unit including a first display area for displaying an execution screen of an application, and a second display area having at least one display device for displaying at least one touch button, a touch panel for sensing a touch of the first display area and a touch of the second display area, a controller for analyzing a selected application, for displaying an application screen along and an input window of the application selected, and for generating a power control signal for turning off operation of the at least one display device of the second display area, and a power controller for supplying operating power to display devices of the first display area and for turning off operation of the at least one display device of the second display area. See abstract.

Prior art such as Park discloses a mobile terminal including a wireless communication unit configured to wirelessly communicate with at least one other terminal; a display unit including a touch screen; and a controller configured to enter the touch screen into a locked state, to display a lock screen and an application program icon for executing an application program on the lock screen when entering the locked state. See abstract.

Prior art such as Miyazaki discloses an information processing apparatus includes a detection unit configured to detect a position of a manipulation body on a display screen and a control unit configured to, if a first manipulation on the display

screen in a locked state is detected, display, on the display screen, icons to be arranged based on a reference point indicating a position of the manipulation body when the first manipulation is completed, and if a second manipulation indicating a direction from the reference point is detected, start up an application corresponding to the icon specified by the second manipulation. An associated method and computer readable storage medium are also described. See abstract.

Prior art fail to disclose “...*a first display mode to display a lock release button without displaying a remote control button on the display unit when the portable terminal apparatus starts up from a sleep state on condition that before the portable terminal apparatus enters the sleep state, a remote control screen for remotely controlling an external device via the wireless communication unit is not displayed on the display unit; a second display mode to display the lock release button without displaying the remote control button on the display unit when the portable terminal apparatus starts up from the sleep state on condition that (1) the wireless communication unit is not able to communicate with an external device, and (2) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed on the display unit; and a third display mode to display the remote control button and the lock release button on the display unit when the portable terminal apparatus starts up from the sleep state on condition that (3) the wireless communication unit is able to communicate with the external device, and (4) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed on the display unit...*” as required in independent claim 1 (similarly, independent claim 3).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SHANTELL HEIBER whose telephone number is (571)272-0886. The examiner can normally be reached on M-F 9am-5pm.

Examiner interviews are available via telephone, in-person, and video conferencing using a USPTO supplied web-based collaboration tool. To schedule an interview, applicant is encouraged to use the USPTO Automated Interview Request (AIR) at <http://www.uspto.gov/interviewpractice>.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Addy can be reached on 571-272-7795. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/SHANTELL L HEIBER/
Primary Examiner, Art Unit 2645
November 24, 2019

<i>Notice of References Cited</i>	Application/Control No. 16/576,079		Applicant(s)/Patent Under Reexamination MASUOKA et al.	
	Examiner SHANTELL L HEIBER		Art Unit 2645	Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	CPC Classification	US Classification
*	A	US-20130069888-A1	03-2013	CHO; Chihyun	G06F1/3265	345/173
*	B	US-8630623-B2	01-2014	Park; Jonghoon	G06F3/0488	455/411
*	C	US-20140109024-A1	04-2014	Miyazaki; Reiko	G06F3/04883	715/863
	D					
	E					
	F					
	G					
	H					
	I					
	J					
	K					
	L					
	M					

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

<i>Search Notes</i> 	Application/Control No. 16/576,079	Applicant(s)/Patent Under Reexamination MASUOKA et al.
	Examiner SHANTELL L HEIBER	Art Unit 2645

CPC - Searched*		
Symbol	Date	Examiner
H04M1/72533 ; H04M2250/02	11/22/2019	SLH
H04N2005/4425	11/22/2019	SLH
H04W12/001 ; H04W12/02 ; H04W12/06 ; H04W12/0602 ; H04W12/0608 ; H04W12/12	11/22/2019	SLH

CPC Combination Sets - Searched*		
Symbol	Date	Examiner

US Classification - Searched*			
Class	Subclass	Date	Examiner

* See search history printout included with this form or the SEARCH NOTES box below to determine the scope of the search.

Search Notes		
Search Notes	Date	Examiner
See East Search report	11/22/2019	SLH

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner
	See East Search report	11/22/2019	SLH

--	--

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S1	2	("20170214784").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2018/04/18 21:36
S2	5	("20070290876" "20120113061" "20120154108" "20140019994" "20140109024").PN.	US-PGPUB; USPAT	OR	ON	2018/04/18 21:54
S3	1894	device with lock with (remote near control)	US-PGPUB; USPAT	OR	ON	2018/04/19 21:27
S4	2	device with lock with (remote near control) with display with sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:27
S5	2	(device with lock with (remote near control) with display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:28
S6	5	(device same lock same (remote near control) same display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 21:29
S7	3	S6 not S5	US-PGPUB; USPAT	OR	ON	2018/04/19 21:29
S8	33	(device with lock with button with display) same sleep	US-PGPUB; USPAT	OR	ON	2018/04/19 22:18
S9	1	sleep with state with (presence sens\$3) with (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:42
S10	6	sleep same state same (presence sens\$3) same (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:43
S11	0	((sleep near state) with (lock near screen)) same (button near display\$3) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:53
S12	0	((sleep near state) same (lock near screen)) same (button near display\$3) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:54
S13	0	((sleep near state) same (lock near screen)) same (display\$3 with (button application icon image)) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:54
S14	0	(sleep same (lock near screen)) same (display\$3 with (button application icon image)) same (connect\$3 with (access near point))	US-PGPUB; USPAT	OR	ON	2018/04/19 22:55
S15	5	(sleep same (lock near screen)) same (display\$3 with (button application icon image)) same connect\$3	US-PGPUB; USPAT	OR	ON	2018/04/19 22:55
S16	36	sleep with display with lock with button	US-PGPUB; USPAT	OR	ON	2018/04/19 23:06
S17	1	"8756511".pn.	US-PGPUB;	OR	ON	2018/04/19

			USPAT			23:18
S18	1	"8630623".pn.	US-PGPUB; USPAT	OR	ON	2018/04/19 23:32
S19	1	"20120154108".pn.	US-PGPUB; USPAT	OR	ON	2018/04/23 22:41
S20	2	("20170214784").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2018/12/19 09:12
S21	5869	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2018/12/19 10:26
S22	103	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/19 10:27
S23	143	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2018/12/19 10:27
S24	48	(lock near2 button) with (wake adj up)	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:31
S25	2	"20140019994".pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:52
S26	2	"8630623".pn.	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 10:53
S27	1	(lock near2 button) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:15
S28	0	((authenticat\$3 security) near2 button) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:15
S29	16	(authenticat\$3 security) with (remote near2 button) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:16
S30	5869	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2018/12/19 17:16
S31	0	S30 and S29	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2018/12/19 17:16
S35	105	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/04/18 10:17
S36	146	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/04/18 10:17
S38	6042	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 16:07
S39	38656	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or	US-PGPUB; USPAT	OR	ON	2019/04/18 17:12

		H04W12/0608 or H04W12/12).cpc.				
S40	432	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 17:22
S41	5	S39 and S40	US-PGPUB; USPAT	OR	ON	2019/04/18 17:22
S42	256	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/04/18 22:56
S43	38656	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S44	1	S42 and S43	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S45	432	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S46	0	S42 and S45	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S47	8	S42 and 455/\$.ccls.	US-PGPUB; USPAT	OR	ON	2019/04/18 22:57
S48	482	((lock security) near button) same (control near button)	US-PGPUB; USPAT	OR	ON	2019/04/18 23:06
S49	0	S45 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:07
S50	11	S43 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:07
S51	440	S48 not S42	US-PGPUB; USPAT	OR	ON	2019/04/18 23:10
S52	3	S47 and S48	US-PGPUB; USPAT	OR	ON	2019/04/18 23:10
S53	22	S48 and 455/\$.ccls.	US-PGPUB; USPAT	OR	ON	2019/04/18 23:11
S54	39665	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S55	461	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S56	14	S54 and S55	US-PGPUB; USPAT	OR	ON	2019/08/22 18:31
S57	114	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S58	368	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	EPO; JPO; DERWENT	OR	OFF	2019/08/22 18:43
S59	114	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S60	157	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/08/22 18:43
S61	20	sleep same state same (presence sens\$3) same (display near3 (code password fingerprint))	US-PGPUB; USPAT	OR	ON	2019/08/22 18:53
S62	50	(device with lock with button with display) same sleep	US-PGPUB; USPAT	OR	ON	2019/08/22 18:53
S63	264	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54

S65	0	S55 and S63	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54
S66	8	455/\$.ccls. and S63	US-PGPUB; USPAT	OR	ON	2019/08/22 18:54
S67	2	("20190230211").PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/08/22 19:01
S68	1	("2014/0019994").URPN.	USPAT	OR	OFF	2019/08/22 19:14
S69	3	((lock security) near button) same (remote near control) same (sleep near state)	US-PGPUB; USPAT	OR	ON	2019/08/22 20:33
S71	2	"20180199279".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/08/23 12:19
S72	39665	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S73	264	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S74	1	S72 and S73	US-PGPUB; USPAT	OR	ON	2019/08/23 16:27
S75	1	"10462278".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/11/21 10:12
S76	3	"10298737".PN.	US-PGPUB; USPAT; USOCR; DERWENT	OR	OFF	2019/11/21 10:12
S77	116	((("MASUOKA") near3 ("Nobuo"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/11/21 23:06
S78	163	((("HASHIMOTO") near3 ("Yasunobu"))).INV.	US-PGPUB; USPAT; USOCR	OR	OFF	2019/11/21 23:06
S80	41057	(H04W12/001 or H04W12/02 or H04W12/06 or H04W12/0602 or H04W12/0608 or H04W12/12).cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S81	477	H04N2005/4425.cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S82	14	S80 and S81	US-PGPUB; USPAT	OR	ON	2019/11/22 14:04
S83	6339	(H04M1/72533 or H04M2250/02).cpc.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:06
S84	2161	device with lock with (remote near control)	US-PGPUB; USPAT	OR	ON	2019/11/22 14:06
S85	32	S83 and S84	US-PGPUB; USPAT	OR	ON	2019/11/22 14:07
S86	268	((lock security) near button) same (remote near control)	US-PGPUB; USPAT	OR	ON	2019/11/22 14:07
S87	8	S83 and S86	US-PGPUB; USPAT	OR	ON	2019/11/22 14:08
S88	0	S81 and S86	US-PGPUB;	OR	ON	2019/11/22

			USPAT			14:08
S89	1	S80 and S86	US-PGPUB; USPAT	OR	ON	2019/11/22 14:08
S90	113	(authenticat\$3 security) with ((control remote) near2 (icon button)) with application	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:10
S91	2093	(authenticat\$3 security) with ((control remote) near2 (icon button))	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:10
S92	171	S80 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:10
S93	1	S81 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:13
S94	19	S83 and S91	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2019/11/22 14:13
S95	8	("20070290876" "20120113061" "20120154108" "20140019994" "20140109024" "8630623" "8756511" "9922347").PN.	US-PGPUB; USPAT	OR	ON	2019/11/22 14:14

EAST Search History (I nterference)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S32	0	(display and mode and lock and release and button and remote and control and sleep and state and acess and point and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S33	0	(display and mode and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S34	1	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2018/12/19 16:58
S37	1	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2019/04/18 10:18
S70	3	(display and lock and release and button and remote and control and sleep and state and screen).clm.	US-PGPUB; USPAT	OR	ON	2019/08/22 18:42
S79	3	(display and lock and release and button and remote and control and sleep and state and screen and mode).clm.	US-PGPUB; USPAT	OR	ON	2019/11/21 23:07

11/ 22/ 2019 9:34:09 PM

C:\ Users\ sheiber\ Documents\ EAST\ Workspaces\ 15326365.wsp

Bibliographic Data

Application No: 16/576,079

Foreign Priority claimed: ☐ Yes ☒ No

35 USC 119 (a-d) conditions met: ☐ Yes ☒ No ☐ Met After Allowance

Verified and Acknowledged: /SHANTELL L HEIBER/

Examiner's Signature

Initials

Title: PORTABLE TERMINAL APPARATUS

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
09/19/2019	455	2645	075425-0083
RULE			

APPLICANTS

MAXELL, LTD., Kyoto, JAPAN

INVENTORS

Nobuo MASUOKA Kyoto, JAPAN

Yasunobu HASHIMOTO Kyoto, JAPAN

CONTINUING DATA

This application is a CON of 16370233 03/29/2019 PAT 10462278

16370233 is a CON of 15326365 01/13/2017 PAT 10298737

15326365 is a 371 of PCT/JP2014/068826 07/15/2014

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

10/02/2019

STATE OR COUNTRY

JAPAN

ADDRESS

MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001
UNITED STATES

FILING FEE RECEIVED

\$1,720

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		2019-09-19
	First Named Inventor	Nobuo MASUOKA	
	Art Unit	N/A	
	Examiner Name	Not Yet Assigned	
	Attorney Docket Number	075425-0083	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button. Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20130069888	A1	2013-03-21	CHO et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button. Add

FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button. Add

NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

1	U.S. PTO Non-Final Office Action issued in related parent U.S. Patent Application No. 16/370,233, dated April 24, 2019.
2	U.S. PTO Notice of Allowance issued in related parent U.S. Patent Application No. 16/370,233, dated August 28 2019.
3	Entire U.S. PTO Image File Wrapper (IFW) of related U.S Patent Application No. 16/370,233 filed March 29, 2019 and U.S. Patent Application No. 15/326,365 filed January 13, 2017.

If you wish to add additional non-patent literature document citation information please click the Add button

Add

EXAMINER SIGNATURE

Examiner Signature	/SHANTELL L HEIBER/	Date Considered	11/22/2019
--------------------	---------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomoki Tanida/	Date (YYYY-MM-DD)	2019-09-19
Name/Print	Tomoki Tanida	Registration Number	60,453

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

U.S.PATENTS

[Remove](#)

Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	9922347	B1	2018-03-20	Burcham et al.	
	2	8630623	B2	2014-01-14	Park et al.	
	3	8756511	B2	2014-06-17	Heo et al.	

If you wish to add additional U.S. Patent citation information please click the Add button.

[Add](#)

U.S.PATENT APPLICATION PUBLICATIONS

[Remove](#)

Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear
	1	20120113061	A1	2012-05-10	Ikedda	(Corresponds to JP 2011-048665A)
	2	20140109024	A1	2014-04-17	Miyazaki	(Corresponds to JP2013-025357A)
	3	20070290876	A1	2007-12-20	Sato et al.	(Corresponds to JP2006-203831A)

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

4	20140019994	A1	2014-01-16	Miyazawa	(Corresponds to JP2014-017735A)
5	20120154108	A1	2012-06-21	Sugaya	(Corresponds to JP2012-142907A)

If you wish to add additional U.S. Published Application citation information please click the Add button. [Add](#)

FOREIGN PATENT DOCUMENTS

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2011-048665	JP	A	2011-03-10	Sony Corp.	(w/English abstract and Corresponds to US Pub 2012/0113061)	
	2	2013-025357	JP	A	2013-02-04	Sony Corp.	(w/English abstract and Corresponds to US Pub 2014/0109024)	
	3	2006-203831	JP	A	2006-08-03	Sony Corp.	(w/English abstract and Corresponds to US Pub 2007/0290876)	
	4	2014-017735	JP	A	2014-01-30	Toshiba Corp.	(w/English abstract and Corresponds to US Pub 2014/0019994)	
	5	2012-142907	JP	A	2012-07-26	Sugaya, Shunji	(w/English abstract and Corresponds to US Pub 2012/0154108)	
	6	2005-295168	JP	A	2005-10-20	Casio Computer Co., Ltd.	(w/English abstract)	
	7	2014-014194	JP	A	2014-01-23	Kyocera Corp.	(w/English abstract)	

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		2019-09-19
First Named Inventor	Nobuo MASUOKA	
Art Unit	N/A	
Examiner Name	Not Yet Assigned	
Attorney Docket Number	075425-0083	

8	2014-056469	JP	A	2014-03-27	Sharp KK	(w/English abstract)
---	-------------	----	---	------------	----------	----------------------

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Search Report issued in corresponding International Patent Application No. PCT/JP2014/068826, dated September 30, 2014, with English Translation.	×
	2	Non-Final Office Action issued in related parent U.S. Patent Application No. 15/326,365, mailed on April 27, 2018.	☐
	3	Notice of Allowances issued in related parent U.S. Patent Application No. 15/326,365, mailed on January 2, 2019..	☐

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature	/SHANTELL L HEIBER/	Date Considered	11/22/2019
--------------------	---------------------	-----------------	------------

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomoki Tanida/	Date (YYYY-MM-DD)	2019-09-19
Name/Print	Tomoki Tanida	Registration Number	60,453

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
16/576,079	09/19/2019	2685	1720	075425-0083	4	2

CONFIRMATION NO. 3325

UPDATED FILING RECEIPT

20277

MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001



Date Mailed: 11/19/2019

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Nobuo MASUOKA, Kyoto, JAPAN;
Yasunobu HASHIMOTO, Kyoto, JAPAN;

Applicant(s)

MAXELL, LTD., Kyoto, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 20277

Domestic Priority data as claimed by applicant

This application is a CON of 16/370,233 03/29/2019 PAT 10462278
which is a CON of 15/326,365 01/13/2017 PAT 10298737
which is a 371 of PCT/JP2014/068826 07/15/2014

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 10/02/2019

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/576,079**

Projected Publication Date: 02/27/2020

Non-Publication Request: No

Early Publication Request: No
Title

PORTABLE TERMINAL APPARATUS

Preliminary Class

340

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/576,079				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)			
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	660			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760			
TOTAL CLAIMS (37 CFR 1.16(j))	4	minus 20 = *			OR	x 100 =	0.00			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *				x 460 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))			If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).			0.00				
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))						0.00				
			TOTAL			TOTAL	1720			
* If the difference in column 1 is less than zero, enter "0" in column 2.										
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	:	Customer Number: 20277
Nobuo MASUOKA et al.	:	
	:	
Application No.: 16/576,079	:	Confirmation No.: 3325
	:	
Filed: September 19, 2019	:	Art Unit: 2685
	:	
For: PORTABLE TERMINAL APPARATUS	:	Examiner: Not Yet Assigned

RESPONSE TO NOTICE TO FILE CORRECTED APPLICATION PAPERS

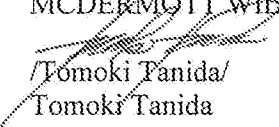
MS Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

In response to the Notice to File Corrected Application Papers, mailed October 4, 2019, Applicant respectfully submits corrected Replacement Drawing Sheets for Fig. 4 and Fig. 6 to coincide with the Brief Description of the Drawings in the specification. No new matter has been added to the Replacement Drawings as filed.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 50-0417, under Order No. 075425-0083 from which the undersigned is authorized to draw.

Respectfully submitted,

MCDERMOTT WILB & EMERY LLP


/Tomoki Tanida/

Tomoki Tanida

Registration No. 60,453

The McDermott Building
500 North Capitol Street, NW
Washington, DC 20001-1531
Phone: (202) 756-8196 TT:rf
Facsimile: (202) 756-8087
Date: November 13, 2019

**Please recognize our Customer No. 20277 as our
correspondence address.**

FIG. 4(a)

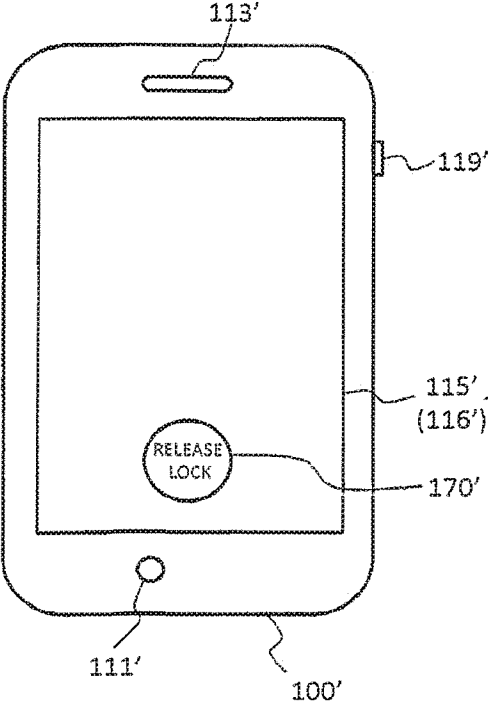


FIG. 4(b)

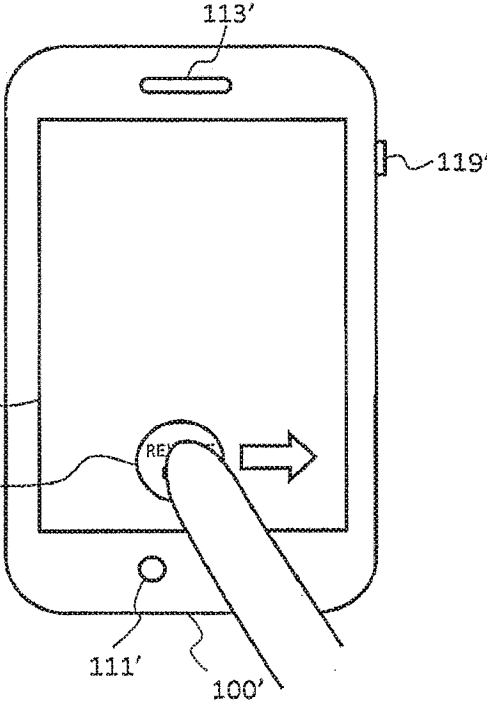


FIG. 4(c)

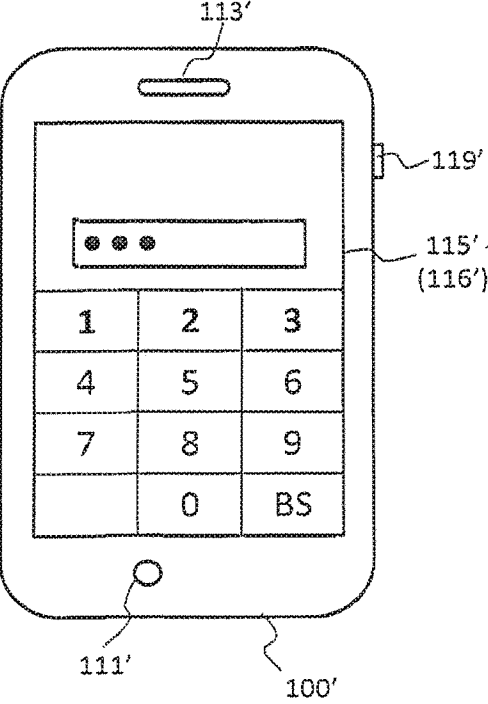
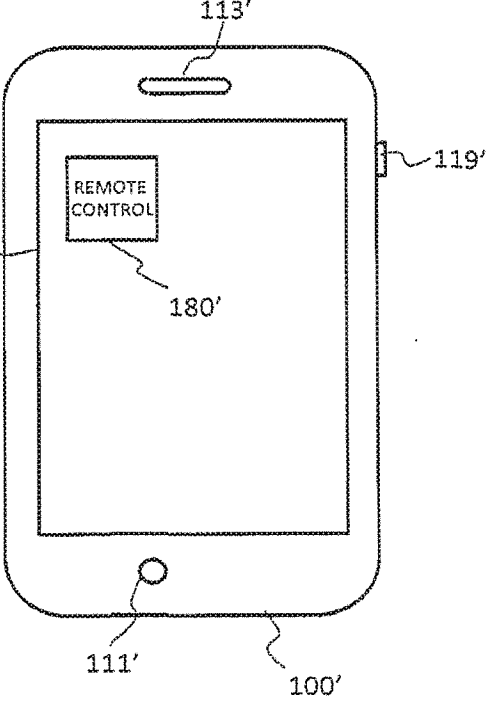


FIG. 4(d)



REPLACEMENT SHEET

5/9

FIG. 6(a)

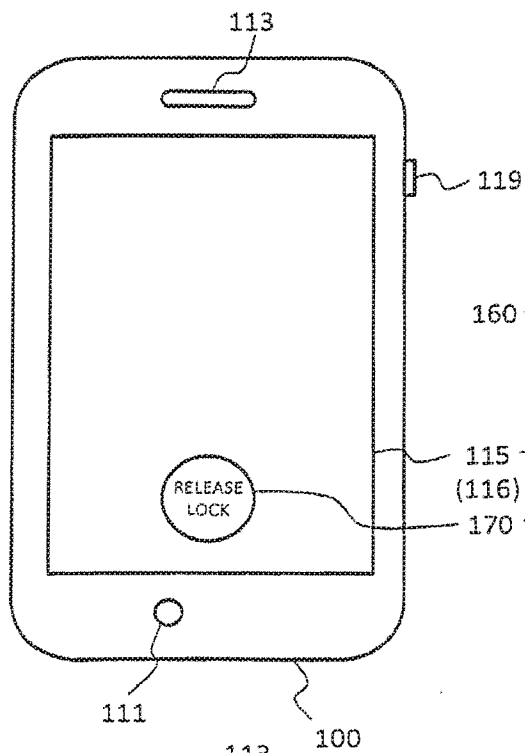


FIG. 6(b)

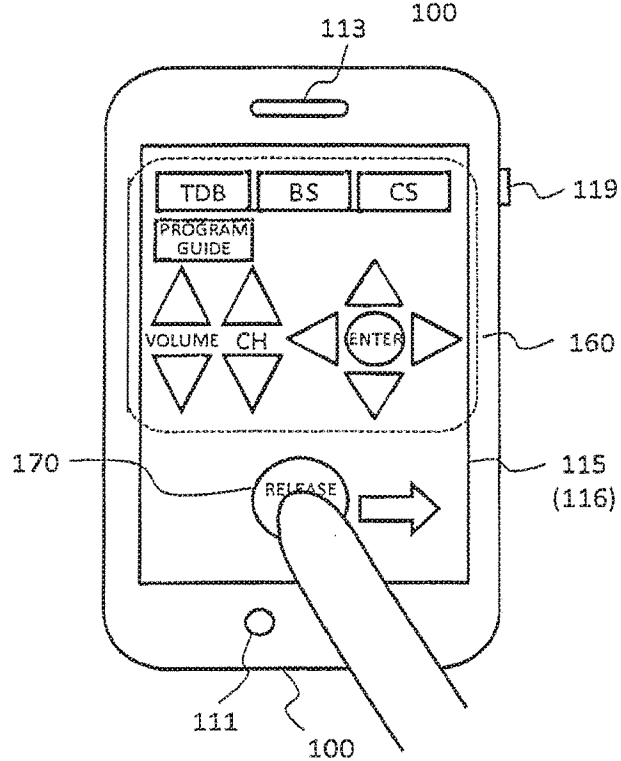
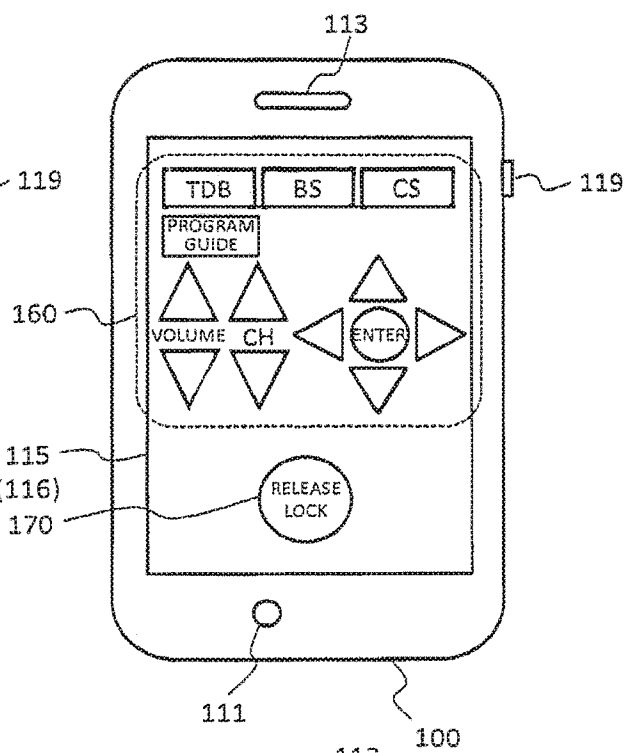


FIG. 6(c)

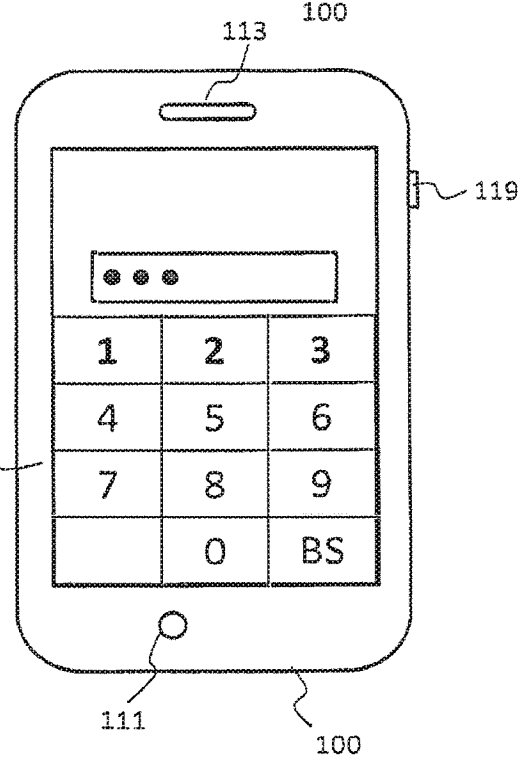


FIG. 6(d)

Electronic Acknowledgement Receipt

EFS ID:	37741563
Application Number:	16576079
International Application Number:	
Confirmation Number:	3325
Title of Invention:	PORTABLE TERMINAL APPARATUS
First Named Inventor/Applicant Name:	Nobuo MASUOKA
Customer Number:	20277
Filer:	Tomoki Tanida/Renell Feimster
Filer Authorized By:	Tomoki Tanida
Attorney Docket Number:	075425-0083
Receipt Date:	13-NOV-2019
Filing Date:	19-SEP-2019
Time Stamp:	15:32:32
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	no
------------------------	----

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal Letter	Corrected_Application_Transmittal.pdf	1439933 990820a57d7f6b3bfd87e4624fbc137a5fe73970	no	1

Warnings:

IPR2025-01316; Samsung

Information:					
2	Drawings-only black and white line drawings	Replacement_Drawings.pdf	190547	no	2
			e64750dc6cfa6841564be2f11b1e48cf306ab0eb		
Warnings:					
Information:					
Total Files Size (in bytes):				1630480	
This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503. <u>New Applications Under 35 U.S.C. 111</u> If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application. <u>National Stage of an International Application under 35 U.S.C. 371</u> If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course. <u>New International Application Filed with the USPTO as a Receiving Office</u> If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.					

PATENT APPLICATION FEE DETERMINATION RECORD Substitute for Form PTO-875						Application or Docket Number 16/576,079				
APPLICATION AS FILED - PART I										
(Column 1)		(Column 2)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY				
FOR	NUMBER FILED	NUMBER EXTRA	RATE(\$)	FEE(\$)		RATE(\$)	FEE(\$)			
BASIC FEE (37 CFR 1.16(a), (b), or (c))	N/A	N/A	N/A			N/A	300			
SEARCH FEE (37 CFR 1.16(k), (l), or (m))	N/A	N/A	N/A			N/A	660			
EXAMINATION FEE (37 CFR 1.16(o), (p), or (q))	N/A	N/A	N/A			N/A	760			
TOTAL CLAIMS (37 CFR 1.16(j))	4	minus 20 = *			OR	x 100 =	0.00			
INDEPENDENT CLAIMS (37 CFR 1.16(h))	2	minus 3 = *				x 460 =	0.00			
APPLICATION SIZE FEE (37 CFR 1.16(s))	If the specification and drawings exceed 100 sheets of paper, the application size fee due is \$310 (\$155 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).						0.00			
MULTIPLE DEPENDENT CLAIM PRESENT (37 CFR 1.16(j))							0.00			
* If the difference in column 1 is less than zero, enter "0" in column 2.			TOTAL			TOTAL	1720			
APPLICATION AS AMENDED - PART II										
(Column 1)		(Column 2)		(Column 3)		SMALL ENTITY		OR OTHER THAN SMALL ENTITY		
AMENDMENT A		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
AMENDMENT B		CLAIMS REMAINING AFTER AMENDMENT		HIGHEST NUMBER PREVIOUSLY PAID FOR	PRESENT EXTRA	RATE(\$)	ADDITIONAL FEE(\$)		RATE(\$)	ADDITIONAL FEE(\$)
	Total (37 CFR 1.16(i))	*	Minus	**	=	x	=	OR	x	=
	Independent (37 CFR 1.16(h))	*	Minus	***	=	x	=	OR	x	=
	Application Size Fee (37 CFR 1.16(s))							OR		
	FIRST PRESENTATION OF MULTIPLE DEPENDENT CLAIM (37 CFR 1.16(j))							OR		
						TOTAL ADD'L FEE		OR	TOTAL ADD'L FEE	
* If the entry in column 1 is less than the entry in column 2, write "0" in column 3. ** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 20, enter "20". *** If the "Highest Number Previously Paid For" IN THIS SPACE is less than 3, enter "3". The "Highest Number Previously Paid For" (Total or Independent) is the highest found in the appropriate box in column 1.										



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING or 371(c) DATE	GRP ART UNIT	FIL FEE REC'D	ATTY. DOCKET NO	TOT CLAIMS	IND CLAIMS
16/576,079	09/19/2019	2685	1720	075425-0083	4	2

CONFIRMATION NO. 3325

FILING RECEIPT



0000000111607333

20277
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

Date Mailed: 10/04/2019

Receipt is acknowledged of this non-provisional utility patent application. The application will be taken up for examination in due course. Applicant will be notified as to the results of the examination. Any correspondence concerning the application must include the following identification information: the U.S. APPLICATION NUMBER, FILING DATE, NAME OF FIRST INVENTOR, and TITLE OF INVENTION. Fees transmitted by check or draft are subject to collection.

Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please submit a written request for a corrected Filing Receipt, including a properly marked-up ADS showing the changes with strike-through for deletions and underlining for additions. If you received a "Notice to File Missing Parts" or other Notice requiring a response for this application, please submit any request for correction to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections provided that the request is grantable.

Inventor(s)

Nobuo MASUOKA, Kyoto, JAPAN;
Yasunobu HASHIMOTO, Kyoto, JAPAN;

Applicant(s)

MAXELL, LTD., Kyoto, JAPAN;

Power of Attorney: The patent practitioners associated with Customer Number 20277

Domestic Priority data as claimed by applicant

This application is a CON of 16/370,233 03/29/2019
which is a CON of 15/326,365 01/13/2017 PAT 10298737
which is a 371 of PCT/JP2014/068826 07/15/2014

Foreign Applications for which priority is claimed (You may be eligible to benefit from the **Patent Prosecution Highway** program at the USPTO. Please see <http://www.uspto.gov> for more information.) - None.

Foreign application information must be provided in an Application Data Sheet in order to constitute a claim to foreign priority. See 37 CFR 1.55 and 1.76.

Permission to Access Application via Priority Document Exchange: Yes

Permission to Access Search Results: Yes

Applicant may provide or rescind an authorization for access using Form PTO/SB/39 or Form PTO/SB/69 as appropriate.

If Required, Foreign Filing License Granted: 10/02/2019

The country code and number of your priority application, to be used for filing abroad under the Paris Convention, is **US 16/576,079**

Projected Publication Date: To Be Determined - pending completion of Corrected Papers

Non-Publication Request: No

Early Publication Request: No
Title

PORTABLE TERMINAL APPARATUS

Preliminary Class

340

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications: No

PROTECTING YOUR INVENTION OUTSIDE THE UNITED STATES

Since the rights granted by a U.S. patent extend only throughout the territory of the United States and have no effect in a foreign country, an inventor who wishes patent protection in another country must apply for a patent in a specific country or in regional patent offices. Applicants may wish to consider the filing of an international application under the Patent Cooperation Treaty (PCT). An international (PCT) application generally has the same effect as a regular national patent application in each PCT-member country. The PCT process **simplifies** the filing of patent applications on the same invention in member countries, but **does not result** in a grant of "an international patent" and does not eliminate the need of applicants to file additional documents and fees in countries where patent protection is desired.

Almost every country has its own patent law, and a person desiring a patent in a particular country must make an application for patent in that country in accordance with its particular laws. Since the laws of many countries differ in various respects from the patent law of the United States, applicants are advised to seek guidance from specific foreign countries to ensure that patent rights are not lost prematurely.

Applicants also are advised that in the case of inventions made in the United States, the Director of the USPTO must issue a license before applicants can apply for a patent in a foreign country. The filing of a U.S. patent application serves as a request for a foreign filing license. The application's filing receipt contains further information and guidance as to the status of applicant's license for foreign filing.

Applicants may wish to consult the USPTO booklet, "General Information Concerning Patents" (specifically, the section entitled "Treaties and Foreign Patents") for more information on timeframes and deadlines for filing foreign patent applications. The guide is available either by contacting the USPTO Contact Center at 800-786-9199, or it can be viewed on the USPTO website at <http://www.uspto.gov/web/offices/pac/doc/general/index.html>.

For information on preventing theft of your intellectual property (patents, trademarks and copyrights), you may wish to consult the U.S. Government website, <http://www.stopfakes.gov>. Part of a Department of Commerce initiative, this website includes self-help "toolkits" giving innovators guidance on how to protect intellectual property in specific

countries such as China, Korea and Mexico. For questions regarding patent enforcement issues, applicants may call the U.S. Government hotline at 1-866-999-HALT (1-866-999-4258).

LICENSE FOR FOREIGN FILING UNDER
Title 35, United States Code, Section 184
Title 37, Code of Federal Regulations, 5.11 & 5.15

GRANTED

The applicant has been granted a license under 35 U.S.C. 184, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" followed by a date appears on this form. Such licenses are issued in all applications where the conditions for issuance of a license have been met, regardless of whether or not a license may be required as set forth in 37 CFR 5.15. The scope and limitations of this license are set forth in 37 CFR 5.15(a) unless an earlier license has been issued under 37 CFR 5.15(b). The license is subject to revocation upon written notification. The date indicated is the effective date of the license, unless an earlier license of similar scope has been granted under 37 CFR 5.13 or 5.14.

This license is to be retained by the licensee and may be used at any time on or after the effective date thereof unless it is revoked. This license is automatically transferred to any related applications(s) filed under 37 CFR 1.53(d). This license is not retroactive.

The grant of a license does not in any way lessen the responsibility of a licensee for the security of the subject matter as imposed by any Government contract or the provisions of existing laws relating to espionage and the national security or the export of technical data. Licensees should apprise themselves of current regulations especially with respect to certain countries, of other agencies, particularly the Office of Defense Trade Controls, Department of State (with respect to Arms, Munitions and Implements of War (22 CFR 121-128)); the Bureau of Industry and Security, Department of Commerce (15 CFR parts 730-774); the Office of Foreign Assets Control, Department of Treasury (31 CFR Parts 500+) and the Department of Energy.

NOT GRANTED

No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

SelectUSA

The United States represents the largest, most dynamic marketplace in the world and is an unparalleled location for business investment, innovation, and commercialization of new technologies. The U.S. offers tremendous resources and advantages for those who invest and manufacture goods here. Through SelectUSA, our nation works to promote and facilitate business investment. SelectUSA provides information assistance to the international investor community; serves as an ombudsman for existing and potential investors; advocates on behalf of U.S. cities, states, and regions competing for global investment; and counsels U.S. economic development organizations on investment attraction best practices. To learn more about why the United States is the best country in the world to develop

technology, manufacture products, deliver services, and grow your business, visit <http://www.SelectUSA.gov> or call +1-202-482-6800.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NUMBER	FILING OR 371(C) DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO./TITLE
16/576,079	09/19/2019	Nobuo MASUOKA	075425-0083

CONFIRMATION NO. 3325

FORMALITIES LETTER



20277
MCDERMOTT WILL & EMERY LLP
THE MCDERMOTT BUILDING
500 NORTH CAPITAL STREET, N.W.
WASHINGTON, DC 20001

Date Mailed: 10/04/2019

NOTICE TO FILE CORRECTED APPLICATION PAPERS

Filing Date Granted

An application number and filing date have been accorded to this application. The application is informal since it does not comply with the regulations for the reason(s) indicated below. Applicant is given **TWO MONTHS** from the date of this Notice within which to correct the informalities indicated below. Extensions of time may be obtained by filing a petition accompanied by the extension fee under the provisions of 37 CFR 1.136(a).

The required item(s) identified below must be timely submitted to avoid abandonment:

- Replacement drawings in compliance with 37 CFR 1.84 and 37 CFR 1.121(d) are required. The drawings submitted are not acceptable because:
 - The application contains drawings and the specification contains a brief description of the drawings. However, the specification does not contain a brief description of the several views of the drawings as required by 37 CFR 1.74 and 37 CFR 1.77(b)(7) and/or a drawing(s) has not been labeled in accordance with 37 CFR 1.84(u)(1). If each figure is not labeled "Fig." with a consecutive Arabic numeral (1, 2, etc.) or an Arabic numeral and capital letter in the English alphabet (A, B, etc.), then the drawing(s) must be relabeled in accordance with 37 CFR 1.84(u)(1). In addition, if the brief description of the several views of the drawings does not refer to the figure(s) as properly labeled, then the specification must be amended to correspond to the figure(s) as properly labeled and a substitute specification in compliance with 37 CFR 1.52, 1.121(b)(3), and 1.125, is required.

Applicant is cautioned that correction of the above items may cause the specification and drawings page count to exceed 100 pages. If the specification and drawings exceed 100 pages, applicant will need to submit the required application size fee.

Replies must be received in the USPTO within the set time period or must include a proper Certificate of Mailing or Transmission under 37 CFR 1.8 with a mailing or transmission date within the set time period. For more information and a suggested format, see Form PTO/SB/92 and MPEP 512.

Replies should be mailed to:

Mail Stop Missing Parts
Commissioner for Patents
P.O. Box 1450
Alexandria VA 22313-1450

Registered users of EFS-Web may alternatively submit their reply to this notice via EFS-Web, including a copy of this Notice and selecting the document description "Applicant response to Pre-Exam Formalities Notice".
<https://sportal.uspto.gov/authenticate/AuthenticateUserLocalEPF.html>

For more information about EFS-Web please call the USPTO Electronic Business Center at 1-866-217-9197 or visit our website at <http://www.uspto.gov/ebc>.

If you are not using EFS-Web to submit your reply, you must include a copy of this notice.

Questions about the contents of this notice and the requirements it sets forth should be directed to the Office of Data Management, Application Assistance Unit, at **(571) 272-4000** or **(571) 272-4200** or **1-888-786-0101**.

/amanalac/

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		2019-09-19
	First Named Inventor	Nobuo MASUOKA	
	Art Unit	N/A	
	Examiner Name	Not Yet Assigned	
	Attorney Docket Number	075425-0083	

U.S.PATENTS							Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1	9922347	B1	2018-03-20	Burcham et al.		
	2	8630623	B2	2014-01-14	Park et al.		
	3	8756511	B2	2014-06-17	Heo et al.		
If you wish to add additional U.S. Patent citation information please click the Add button.							Add
U.S.PATENT APPLICATION PUBLICATIONS							Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	
	1	20120113061	A1	2012-05-10	Ikedda	(Corresponds to JP 2011-048665A)	
	2	20140109024	A1	2014-04-17	Miyazaki	(Corresponds to JP2013-025357A)	
	3	20070290876	A1	2007-12-20	Sato et al.	(Corresponds to JP2006-203831A)	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

4	20140019994	A1	2014-01-16	Miyazawa	(Corresponds to JP2014-017735A)
5	20120154108	A1	2012-06-21	Sugaya	(Corresponds to JP2012-142907A)

If you wish to add additional U.S. Published Application citation information please click the Add button. [Add](#)

FOREIGN PATENT DOCUMENTS

[Remove](#)

Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ² i	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages, Columns, Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1	2011-048665	JP	A	2011-03-10	Sony Corp.	(w/English abstract and Corresponds to US Pub 2012/0113061)	
	2	2013-025357	JP	A	2013-02-04	Sony Corp.	(w/English abstract and Corresponds to US Pub 2014/0109024)	
	3	2006-203831	JP	A	2006-08-03	Sony Corp.	(w/English abstract and Corresponds to US Pub 2007/0290876)	
	4	2014-017735	JP	A	2014-01-30	Toshiba Corp.	(w/English abstract and Corresponds to US Pub 2014/0019994)	
	5	2012-142907	JP	A	2012-07-26	Sugaya, Shunji	(w/English abstract and Corresponds to US Pub 2012/0154108)	
	6	2005-295168	JP	A	2005-10-20	Casio Computer Co., Ltd.	(w/English abstract)	
	7	2014-014194	JP	A	2014-01-23	Kyocera Corp.	(w/English abstract)	

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		2019-09-19
First Named Inventor	Nobuo MASUOKA	
Art Unit	N/A	
Examiner Name	Not Yet Assigned	
Attorney Docket Number	075425-0083	

8	2014-056469	JP	A	2014-03-27	Sharp KK	(w/English abstract)
---	-------------	----	---	------------	----------	----------------------

If you wish to add additional Foreign Patent Document citation information please click the Add button

NON-PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵
	1	Search Report issued in corresponding International Patent Application No. PCT/JP2014/068826, dated September 30, 2014, with English Translation.	×
	2	Non-Final Office Action issued in related parent U.S. Patent Application No. 15/326,365, mailed on April 27, 2018.	☐
	3	Notice of Allowances issued in related parent U.S. Patent Application No. 15/326,365, mailed on January 2, 2019..	☐

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomoki Tanida/	Date (YYYY-MM-DD)	2019-09-19
Name/Print	Tomoki Tanida	Registration Number	60,453

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		2019-09-19
	First Named Inventor	Nobuo MASUOKA	
	Art Unit	N/A	
	Examiner Name	Not Yet Assigned	
	Attorney Docket Number	075425-0083	

U.S.PATENTS						Remove
Examiner Initial*	Cite No	Patent Number	Kind Code ¹	Issue Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1					

If you wish to add additional U.S. Patent citation information please click the Add button.

Add

U.S.PATENT APPLICATION PUBLICATIONS						Remove
Examiner Initial*	Cite No	Publication Number	Kind Code ¹	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear
	1	20130069888	A1	2013-03-21	CHO et al.	

If you wish to add additional U.S. Published Application citation information please click the Add button.

Add

FOREIGN PATENT DOCUMENTS							Remove	
Examiner Initial*	Cite No	Foreign Document Number ³	Country Code ²ⁱ	Kind Code ⁴	Publication Date	Name of Patentee or Applicant of cited Document	Pages,Columns,Lines where Relevant Passages or Relevant Figures Appear	T ⁵
	1							

If you wish to add additional Foreign Patent Document citation information please click the Add button

Add

NON-PATENT LITERATURE DOCUMENTS			Remove
Examiner Initials*	Cite No	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc), date, pages(s), volume-issue number(s), publisher, city and/or country where published.	T ⁵

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number		
Filing Date		2019-09-19
First Named Inventor	Nobuo MASUOKA	
Art Unit	N/A	
Examiner Name	Not Yet Assigned	
Attorney Docket Number	075425-0083	

1	U.S. PTO Non-Final Office Action issued in related parent U.S. Patent Application No. 16/370,233, dated April 24, 2019.
2	U.S. PTO Notice of Allowance issued in related parent U.S. Patent Application No. 16/370,233, dated August 28 2019.
3	Entire U.S. PTO Image File Wrapper (IFW) of related U.S Patent Application No. 16/370,233 filed March 29, 2019 and U.S. Patent Application No. 15/326,365 filed January 13, 2017.

If you wish to add additional non-patent literature document citation information please click the Add button

EXAMINER SIGNATURE

Examiner Signature		Date Considered	
--------------------	--	-----------------	--

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through a citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

¹ See Kind Codes of USPTO Patent Documents at www.USPTO.GOV or MPEP 901.04. ² Enter office that issued the document, by the two-letter code (WIPO Standard ST.3). ³ For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁴ Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁵ Applicant is to place a check mark here if English language translation is attached.

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**
(Not for submission under 37 CFR 1.99)

Application Number	
Filing Date	2019-09-19
First Named Inventor	Nobuo MASUOKA
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

CERTIFICATION STATEMENT

Please see 37 CFR 1.97 and 1.98 to make the appropriate selection(s):

That each item of information contained in the information disclosure statement was first cited in any communication from a foreign patent office in a counterpart foreign application not more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(1).

OR

☐ That no item of information contained in the information disclosure statement was cited in a communication from a foreign patent office in a counterpart foreign application, and, to the knowledge of the person signing the certification after making reasonable inquiry, no item of information contained in the information disclosure statement was known to any individual designated in 37 CFR 1.56(c) more than three months prior to the filing of the information disclosure statement. See 37 CFR 1.97(e)(2).

See attached certification statement.

The fee set forth in 37 CFR 1.17 (p) has been submitted herewith.

☒ A certification statement is not submitted herewith.

SIGNATURE

A signature of the applicant or representative is required in accordance with CFR 1.33, 10.18. Please see CFR 1.4(d) for the form of the signature.

Signature	/Tomoki Tanida/	Date (YYYY-MM-DD)	2019-09-19
Name/Print	Tomoki Tanida	Registration Number	60,453

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 1 hour to complete, including gathering, preparing and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.

Electronic Patent Application Fee Transmittal

Application Number:				
Filing Date:				
Title of Invention:	PORTABLE TERMINAL APPARATUS			
First Named Inventor/Applicant Name:	Nobuo Masuoka			
Filer:	Tomoki Tanida/Renell Feimster			
Attorney Docket Number:	075425-0083			
Filed as Large Entity				
Filing Fees for Utility under 35 USC 111(a)				
Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Basic Filing:				
UTILITY APPLICATION FILING	1011	1	300	300
UTILITY SEARCH FEE	1111	1	660	660
UTILITY EXAMINATION FEE	1311	1	760	760
Pages:				
Claims:				
Miscellaneous-Filing:				
Petition:				
Patent-Appeals-and-Interference:				

IPR2025-01316; Samsung

Description	Fee Code	Quantity	Amount	Sub-Total in USD(\$)
Post-Allowance-and-Post-Issuance:				
Extension-of-Time:				
Miscellaneous:				
Total in USD (\$)				1720

Electronic Acknowledgement Receipt

EFS ID:	37216047
Application Number:	16576079
International Application Number:	
Confirmation Number:	3325
Title of Invention:	PORTABLE TERMINAL APPARATUS
First Named Inventor/Applicant Name:	Nobuo Masuoka
Customer Number:	20277
Filer:	Tomoki Tanida/Renell Feimster
Filer Authorized By:	Tomoki Tanida
Attorney Docket Number:	075425-0083
Receipt Date:	19-SEP-2019
Filing Date:	
Time Stamp:	15:33:23
Application Type:	Utility under 35 USC 111(a)

Payment information:

Submitted with Payment	yes
Payment Type	DA
Payment was successfully received in RAM	\$ 1720
RAM confirmation Number	E20199IF33561250
Deposit Account	500417
Authorized User	Renell Feimster

The Director of the USPTO is hereby authorized to charge indicated fees and credit any overpayment as follows:

37 CFR 1.16 (National application filing, search, and examination fees)

37 CFR 1.17 (Patent application and reexamination processing fees)

IPR2025-01316; Samsung

37 CFR 1.19 (Document supply fees)
37 CFR 1.20 (Post Issuance fees)
37 CFR 1.21 (Miscellaneous fees and charges)

File Listing:

Document Number	Document Description	File Name	File Size(Bytes)/ Message Digest	Multi Part /.zip	Pages (if appl.)
1	Transmittal of New Application	Application_Fees_Transmittals.pdf	5015716	no	2
			2b1be0ade9b5905e20719e02cc152f658bf88302		
Warnings:					
Information:					
2	Application Data Sheet	ADS.pdf	1255970	no	9
			9ea29b5bb149d6f824f8aed0eaada7996f581f83		
Warnings:					
Information:					
3	Power of Attorney	Transmittal_POA.pdf	2106057	no	3
			f49caa33b1027e43a23f1209c5b695911dfc372b		
Warnings:					
Information:					
4	Oath or Declaration filed	Declaration.pdf	566902	no	2
			98d80cf093588c900f103a695e0e1eea383c8c91		
Warnings:					
Information:					
5		Specification.pdf	3895062	yes	30
			c44f6c16886afe997733f46e43f69799faec4608		
	Multipart Description/PDF files in .zip description				
	Document Description		Start	End	
	Specification		1	26	
	Claims		27	29	
	Abstract		30	30	
IPR2025-01316: Samsung					

Warnings:					
Information:					
6	Drawings-only black and white line drawings	Formal_Drawings.pdf	705048	no	9
			80316f4f23a7ae6c1221219219b21a0c4ffc4693		
Warnings:					
Information:					
7	Transmittal Letter	IDS_Transmittal.pdf	1049320	no	2
			cba02bf4ae046f84a4892d89d2ac3cbcd370cf60		
Warnings:					
Information:					
8	Information Disclosure Statement (IDS) Form (SB08)	IDS_SB08_1.pdf	1035192	no	5
			8d0cd182479a7f7de38bef9c7ef3901434e3f58a		
Warnings:					
Information:					
9	Information Disclosure Statement (IDS) Form (SB08)	IDS_SB08_2.pdf	1034401	no	4
			37f98f5816b143df856e2f999edcf91f3feaad7c		
Warnings:					
Information:					
10	Fee Worksheet (SB06)	fee-info.pdf	34905	no	2
			d9c94f168f1b2f7f7bc85ea6cc0cbd3516fc3dde		
Warnings:					
Information:					
Total Files Size (in bytes):			16698573		

This Acknowledgement Receipt evidences receipt on the noted date by the USPTO of the indicated documents, characterized by the applicant, and including page counts, where applicable. It serves as evidence of receipt similar to a Post Card, as described in MPEP 503.

New Applications Under 35 U.S.C. 111

If a new application is being filed and the application includes the necessary components for a filing date (see 37 CFR 1.53(b)-(d) and MPEP 506), a Filing Receipt (37 CFR 1.54) will be issued in due course and the date shown on this Acknowledgement Receipt will establish the filing date of the application.

National Stage of an International Application under 35 U.S.C. 371

If a timely submission to enter the national stage of an international application is compliant with the conditions of 35 U.S.C. 371 and other applicable requirements a Form PCT/DO/EO/903 indicating acceptance of the application as a national stage submission under 35 U.S.C. 371 will be issued in addition to the Filing Receipt, in due course.

New International Application Filed with the USPTO as a Receiving Office

If a new international application is being filed and the international application includes the necessary components for an international filing date (see PCT Article 11 and MPEP 1810), a Notification of the International Application Number and of the International Filing Date (Form PCT/RO/105) will be issued in due course, subject to prescriptions concerning national security, and the date shown on this Acknowledgement Receipt will establish the international filing date of the application.

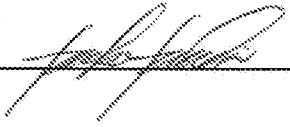
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.

TRANSMITTAL FOR POWER OF ATTORNEY TO ONE OR MORE REGISTERED PRACTITIONERS

NOTE: This form is to be submitted with the Power of Attorney by Applicant form (PTO/AIA/82B) to identify the application to which the Power of Attorney is directed, in accordance with 37 CFR 1.5, unless the application number and filing date are identified in the Power of Attorney by Applicant form. If neither form PTO/AIA/82A nor form PTO/AIA/82B identifies the application to which the Power of Attorney is directed, the Power of Attorney will not be recognized in the application.

Application Number	Not Yet Assigned
Filing Date	September 19, 2019
First Named Inventor	Nobuo MASUOKA
Title	PORTABLE TERMINAL APPARATUS
Art Unit	N/A
Examiner Name	Not Yet Assigned
Attorney Docket Number	075425-0083

SIGNATURE of Applicant or Patent Practitioner

Signature	/Tomoki Tanida/ 	Date (Optional)	September 19, 2019
Name	Tomoki Tanida	Registration Number	60,453
Title (if Applicant is a juristic entity)			
Applicant Name (if Applicant is a juristic entity)			

NOTE: This form must be signed in accordance with 37 CFR 1.33. See 37 CFR 1.4(d) for signature requirements and certifications. If more than one applicant, use multiple forms.



*Total of 1 forms are submitted.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

出願人による委任状
POWER OF ATTORNEY BY APPLICANT

私はここに、添付の伝送書もしくは下記枠内で特定された出願に対して、現時点より前に与えられたすべての委任状を破棄します。
I hereby revoke all previous powers of attorney given in the application identified in either the attached transmittal letter or the boxes below.

出願番号 Application Number	出願日 Filing Date

(注記: PTO/AIA/82Aに同じ情報が明記されている場合、上の枠内は空欄でも可)
(Note: The boxes above may be left blank if information is provided on form PTO/AIA/82A.)

☒ 私は、下記顧客番号に関連する特許弁護士を、当方の弁護士あるいは代理人に指名し、添付の伝送書 (PTO/AIA/82A) 内もしくは上記に記載の特許出願に関連した米国特許商標庁との業務の全てを同弁護士あるいは代理人に委任します。

I hereby appoint the Patent Practitioner(s) associated with the following Customer Number as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above:

又は
OR

20277

☐ 私は、添付のリスト (PTO/AIA/82C) に記載の特許弁護士を、当方の弁護士あるいは代理人に指名し、添付の伝送書 (PTO/AIA/82A) 内もしくは上記に記載の特許出願に関連した米国特許商標庁との業務の全てを同弁護士あるいは代理人に委任します。(注記: PTO/AIA/82C を記入すること。)

I hereby appoint Practitioner(s) named in the attached list (form PTO/AIA/82C) as my/our attorney(s) or agent(s), and to transact all business in the United States Patent and Trademark Office connected therewith for the patent application referenced in the attached transmittal letter (form PTO/AIA/82A) or identified above. (Note: Complete form PTO/AIA/82C.)

添付の伝送書又は上記枠内にて特定された出願に対する郵便物送付先を下記のいずれかに登録または変更してください。
Please recognize or change the correspondence address for the application identified in the attached transmittal letter or the boxes above to:

☒ 上記顧客番号に付随する住所
The address associated with the above-mentioned Customer Number

又は
OR

☐ 顧客番号に付随する住所
The address associated with Customer Number:

又は
OR

事務所または個人 名 Firm or Individual Name				
住所 Address				
市 City	州 State	郵便番号 Zip		
国 Country				
電話番号 Telephone	メールアドレス Email			

This collection of information is required by 37 CFR 1.131, 1.32, and 1.33. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 3 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

出願人による委任状 POWER OF ATTORNEY BY APPLICANT

私は出願人であり（出願人が法人の場合、出願人名を下記枠内に記入）：

I am the Applicant (if the Applicant is a juristic entity, list the Applicant name in the box):

Maxell, Ltd.

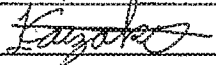
- ☐ 発明者もしくは共同発明者である（下記役職の明記は不要）
Inventor or Joint Inventor (title not required below)
- ☐ 死亡したもしくは成年被後見人である発明者の法定代理人である（下記役職の明記は不要）
Legal Representative of a Deceased or Legally Incapacitated Inventor (title not required below)
- ☒ 被譲渡人もしくは発明者が譲渡する義務を負う人物である
Assignee or Person to Whom the Inventor is Under an Obligation to Assign (provide signer's title if applicant is a juristic entity)
- ☐ 上記以外で、十分な独占的所有権を示す人物である（例：37 CFR 1.46(b)(2)に基づく申請が本出願において認められた、又は本書類と共にその申請がなされている場合）（出願人が法人の場合、署名者の役職を明記すること）
Person Who Otherwise Shows Sufficient Proprietary Interest (e.g., a petition under 37 CFR 1.46(b)(2) was granted in the application or is concurrently being filed with this document) (provide signer's title if applicant is a juristic entity)

特許出願人の署名

SIGNATURE of Applicant for Patent

下記署名者（役職は下記に記載）は出願人の代理人と認められている（出願人が法人の場合等）

The undersigned (whose title is supplied below) is authorized to act on behalf of the applicant (e.g., where the applicant is a juristic entity).

署名 Signature		署名日（任意） Date (Optional)	Oct. 17, 2017
氏名 Name	Kazuhiro Kaizaki		
役職 Title	Vice President		

注記：署名 - 本書類は37 CFR 1.33に基づき署名されなければならない。署名の要件および証明に関しては37 CFR 1.4を参照。出願人が複数いる場合は、複数の書類を使うこと。

NOTE: Signature - This form must be signed by the applicant in accordance with 37 CFR 1.33. See 37 CFR 1.4 for signature requirements and certifications. If more than one applicant, use multiple forms.

☐ 提出書類 計 _____ 枚。
Total of _____ forms are submitted.

申請データシート(37 CFR 1.76)を使った実用及び意匠登録出願書(37 CFR 1.63)
DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET
(37 CFR 1.76)

発明の名称 Title of Invention	PORTABLE TERMINAL APPARATUS
下記発明者である私は、つぎのことを宣言します。 As the below named inventor, I hereby declare that: 本宣言は ☐ 添付されている、あるいは This declaration is directed to: The attached application, or ☒ 年 月 日に提出された米国出願番号またはPCT国際出願番号 に宛てられています。 United States application or PCT international application number PCT/JP2014/068826 filed on July 15 2014 上記の出願は私自身、あるいは私が権限を授与したのものによって行われたものです。 The above-identified application was made or authorized to be made by me. 私は本出願書中にあらわれるもともとの発明者、あるいはもともとの共同発明者です。 I believe that I am the original inventor or an original joint inventor of a claimed invention in the application. 本宣言書において故意に虚偽の申し立てを行った場合は 18 U.S.C. 1001 により、罰金あるいは最高五(5)年の禁固刑、あるいはその両方による罰則の対象となることを認めます。 I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both. 警告: WARNING: 請願者/出願者は ID 盗難を助けるような個人情報を、特許出願書類中に含まないよう、注意が必要です。社会保障番号、銀行口座番号、あるいはクレジットカード番号のような個人情報の提出は(支払いを目的とした、小切手あるいはクレジットカード使用認証書類である PTO-2038 への記入を例外として)USPTO(米国特許商標庁)は、請願あるいは出願申請のうえでいっさい要求していません。このような個人情報が USPTO に提出する書類に含まれることがないよう、請願者/出願者は、USPTO に書類を提出する前によく注意し、もしあった場合は訂正し、抹消せねばなりません。請願者/出願者は、特許出願の記録内容は、出願の公開、あるいは特許交付後は、(37 CFR 1.213(a) の規制に合致した非公開申請が申請書のなかでなされている場合を除き)、一般人が入手可能なものとなることを知っておく必要があります。さらに、出願が放棄された記録であっても、その出願が公開された、あるいは特許が交付された出願書中に参考として置かれている場合は、一般人の入手が可能となる場合があります。小切手およびクレジットカード承認用紙であり、支払い目的のために提出された PTO-2038 様式は出願ファイルには保持されず、したがって一般人が入手することはできません。 Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.	
発明者の正式氏名 LEGAL NAME OF INVENTOR 発明者: Nobuo MASUOKA Inventor: 署名: <i>Nobuo Masuoka</i> Signature:	

備考: 出願データシート(PTO/SB/14 あるいはその同等用紙)は、発明の自主独立主体の命名を含め、本用紙に添付すること。なお残余の発明者ごとに PTO/SB/AIA01 用紙を使用する。
Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional PTO/SB/AIA01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing this form, call 1-800-PTO-5199 and select option 2.

申請データシート(37 CFR 1.76)を使った実用及び意匠登録出願宣言書(37 CFR 1.63)
DECLARATION (37 CFR 1.63) FOR UTILITY OR DESIGN APPLICATION USING AN APPLICATION DATA SHEET
(37 CFR 1.76)

発明の名称
Title of
Invention

PORTABLE TERMINAL APPARATUS

下記発明者である私は、つぎのことがらを宣誓します。
As the below named inventor, I hereby declare that:

本宣誓は
This declaration
is directed to:

☐

添付されている、あるいは
The attached application, or

☒

____年____月____日に出願された米国出願番号またはPCT国際出願番号____に宛てられています。
United States application or PCT international application number PCT/P2014/068826 filed on July 15, 2014

上記の出願は私自身、あるいは私が権限を授与したものによって行われたものです。
The above-identified application was made or authorized to be made by me.

私は本出願書中にあらわれるもとの発明者、あるいはもとの共同発明者です。
I believe that I am the original inventor or an original joint inventor of a claimed invention in the application.

本宣誓書において故意に虚偽の申し立てを行った場合は 18 U.S.C. 1001 により、罰金あるいは最高五(5)年の禁固刑、あるいはその両方による罰則の対象となることを認めます。

I hereby acknowledge that any willful false statement made in this declaration is punishable under 18 U.S.C. 1001 by fine or imprisonment of not more than five (5) years, or both.

警告:

WARNING:

請願者/出願者は ID 盗難を助けるような個人情報を、特許出願書類中に含まないよう、注意が必要です。社会保障番号、銀行口座番号、あるいはクレジットカード番号のような個人情報の提出は(支払いを目的とした、小切手あるいはクレジットカード使用認証書類である PTO-2038 への記入を例外として) USPTO(米国特許商標庁)は、請願あるいは出願申請のうえでいっさい要求していません。このような個人情報が USPTO に提出する書類に含まれることがないよう、請願者/出願者は、USPTO に書類を提出する前によく注意し、もしあった場合は訂正し、抹消せねばなりません。請願者/出願者は、特許出願の記録内容は、出願の公開、あるいは特許交付後は、(37 CFR 1.213(a) の規制に合致した非公開申請が申請書のなかでなされている場合を除き)、一般人が入手可能なものとなることを知っておく必要があります。さらに、出願が放棄された記録であっても、その出願が公開された、あるいは特許が交付された出願書中に参考として言及されている場合は、一般人の入手が可能となる場合があります。小切手およびクレジットカード承認用紙であり、支払い目的のために提出された PTO-2038 様式は出願ファイルには保持されず、したがって一般人が入手することはできません。

Petitioner/applicant is cautioned to avoid submitting personal information in documents filed in a patent application that may contribute to identity theft. Personal information such as social security numbers, bank account numbers, or credit card numbers (other than a check or credit card authorization form PTO-2038 submitted for payment purposes) is never required by the USPTO to support a petition or an application. If this type of personal information is included in documents submitted to the USPTO, petitioners/applicants should consider redacting such personal information from the documents before submitting them to the USPTO. Petitioner/applicant is advised that the record of a patent application is available to the public after publication of the application (unless a non-publication request in compliance with 37 CFR 1.213(a) is made in the application) or issuance of a patent. Furthermore, the record from an abandoned application may also be available to the public if the application is referenced in a published application or an issued patent (see 37 CFR 1.14). Checks and credit card authorization forms PTO-2038 submitted for payment purposes are not retained in the application file and therefore are not publicly available.

発明者の正式氏名
LEGAL NAME OF INVENTOR

発明者: Yasunobu HASHIMOTO

Inventor:

日付(任意):

12/28/2016

Date (Optional):

署名:

Yasunobu Hashimoto

Signature:

備考: 出願データシート(PTO/SB/14 あるいはその同等用紙)は、発明の自主独立体全体の命名を含め、本用紙に添付すること。なお残余の発明者ごとに PTO/SB/AIA01 用紙を使用する。

Note: An application data sheet (PTO/SB/14 or equivalent), including naming the entire inventive entity, must accompany this form. Use an additional PTO/SB/AIA01 form for each additional inventor.

This collection of information is required by 35 U.S.C. 115 and 37 CFR 1.63. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.31 and 1.14. This collection is estimated to take 1 minute to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 and select option 2.

SPECIFICATION

TITLE OF THE INVENTION

PORTABLE TERMINAL APPARATUS

5

CROSS REFERENCE

This application is a Continuation of U.S. Patent Application No. 16/370,233, filed on March 29, 2019 which is a Continuation of U.S. Patent Application No. 15/326,365, filed on January 13, 2017,
10 now U.S. Patent No. 10/298,737, issued on May 21, 2019, which is the U.S. National Phase under 35 U.S.C. § 371 of International Application No. PCT/JP2014/068826, filed on July 15, 2014, the entire contents of each are hereby incorporated by reference.

15

TECHNICAL FIELD

The present invention relates to a portable terminal apparatus.

BACKGROUND ART

20 In recent years, portable terminal apparatuses on which touch panels are mounted, for example, a smartphone, have been widely used. These portable terminal apparatuses include a lock function to prevent unintended input operations. In addition, in order to prevent an unauthorized operation by a third party, password
25 authentication, pattern authentication, and the like are used to release the lock function (Patent Documents 1 and 2).

Furthermore, in recent years, by using a wireless LAN function mounted in a portable terminal apparatus, it is possible to remotely

control electronic devices such as a television apparatus and a recorder apparatus via the LAN (Patent Document 3).

RELATED ART DOCUMENTS

5 PATENT DOCUMENTS

Patent Document 1: Japanese Patent Application Laid-Open Publication No. 2011-48665

Patent Document 2: Japanese Patent Application Laid-Open Publication No. 2013-25357

10 Patent Document 3: Japanese Patent Application Laid-Open Publication No. 2006-203831

SUMMARY OF THE INVENTION

PROBLEMS TO BE SOLVED BY THE INVENTION

15 Remote control operations on a television apparatus by using a portable terminal apparatus include a channel selection operation at the start of viewing, a volume control operation during viewing, and a channel selection operation at the end of a given program to select a next program to be viewed. When, for example, selecting
20 a program to be viewed, the user continuously performs a plurality of remote control operations such as "displaying a program guide," "selecting a desired program to be viewed," and "starting to view (channel selection)." In addition, the user often performs remote control operations after a few minutes or more has passed since a
25 previous remote control operation such as remote control operations when performing volume control during viewing or selecting a next program to be viewed after the end of a viewed program.

In order to suppress battery consumption, a portable terminal

apparatus is often set such that the portable terminal apparatus is put into a sleep state when a predetermined time (e.g., 30 seconds) of a non-operation state passes. When the above predetermined time has passed since the previous remote control operation, since the portable terminal apparatus is put into the sleep state, it is necessary to start up the portable terminal apparatus before performing a remote control operation.

As described above, in order to prevent an unauthorized operation by a third party, the lock function is active at the time of startup, and hence, it is necessary to release the lock function by the password authentication or the pattern authentication. That is, when the apparatus is in the sleep state, it is necessary to perform a lock function release operation such as the password authentication or the pattern authentication before performing a remote control operation. This leads to poor operability as a remote controller. Setting a mode of releasing the lock function without authentication can improve the operability to some extent. In this case, however, it is not possible to prevent an unauthorized operation by a third party, causing a security problem.

In view of the above problem, the present invention provides a portable terminal apparatus having high operability as a remote controller while ensuring security performance.

MEANS FOR SOLVING THE PROBLEMS

In order to solve the above problem, the typical ones of the inventions disclosed in the present application will be briefly described as follows.

(1) A portable terminal apparatus includes a display unit displaying an image, a wireless communication unit performing

wireless communication, and a control unit, and the portable terminal apparatus has a feature that the control unit determines whether remote control of an external apparatus can be performed by using the portable terminal apparatus via the wireless communication unit, at a time of startup from a sleep state, and controls such that a remote control button is displayed on the display unit in accordance with the startup from the sleep state, when it is determined that remote control can be performed.

(2) A portable terminal apparatus includes a display unit displaying an image, an operation input unit inputting a user operation, and a wireless communication unit performing wireless communication by a wireless LAN, and the portable terminal apparatus has a feature that, at a time of startup from a sleep state, a remote control button is displayed on the display unit when a mutual communication with a predetermined access point can be performed in the wireless communication unit, and when the remote control button is selected, a remote control signal corresponding to the selected remote control button is transmitted.

(3) A portable terminal apparatus includes a display unit displaying an image, an operation input unit inputting a user operation, and a wireless communication unit performing wireless communication by a wireless LAN, and the portable terminal apparatus has a feature that, when the portable terminal apparatus is put into a sleep state with a remote control screen being displayed, a remote control button is displayed on the display unit at a time of startup from the sleep state when a mutual communication with a predetermined access point can be performed in the wireless communication unit, and when the remote control button is selected, a remote control

signal corresponding to the selected remote control button is transmitted.

(4) A portable terminal apparatus includes a display unit displaying an image, an operation input unit inputting a user operation, a GPS receiving unit acquiring a position, and a wireless communication unit performing wireless communication by a wireless LAN, and the portable terminal apparatus has a feature that, at a time of startup from a sleep state, a remote control button is displayed on the display unit when a position is acquired by the GPS receiving unit and the position is near a predetermined position, and when the remote control button is selected, a remote control signal corresponding to the selected remote control button is transmitted.

(5) A portable terminal apparatus includes a display unit displaying an image, an operation input unit inputting a user operation, and a wireless communication unit performing wireless communication, and the portable terminal apparatus has a feature that the portable terminal apparatus includes a determination unit determining whether the portable terminal apparatus is located in a user area, a remote control button is displayed on the display unit at a time of startup from a sleep state when the determination unit determines that the portable terminal apparatus is located in the user area, and when the remote control button is selected, a remote control signal corresponding to the selected remote control button is transmitted.

EFFECTS OF THE INVENTION

The present invention can provide a portable terminal apparatus having high operability as a remote controller while

ensuring security performance. Problems, configurations, and effects other than those described above will become obvious from the description of the following embodiments.

5

BRIEF DESCRIPTIONS OF THE DRAWINGS

FIG. 1 is a block diagram showing an example of an internal configuration of a portable terminal apparatus according to a first embodiment;

FIG. 2 is a view showing a configuration example of an entire system when an electronic device is remotely controlled;

FIG. 3 is a view showing a display example when an electronic device (TV) is remotely controlled in the portable terminal apparatus;

FIGS. 4(a) to 4(d) are views for explaining an operation of starting up a portable terminal apparatus from a sleep state;

FIG. 5 is a flowchart showing an operation of the portable terminal apparatus;

FIGS. 6 (a) to 6(d) are views showing an example of a lock screen of the portable terminal apparatus;

FIG. 7 is a table summarizing a correspondence between a state at a time of releasing the sleep state and a lock screen;

FIG. 8 is a flowchart showing an operation of a portable terminal apparatus according to a second embodiment;

FIG. 9 is a table summarizing a correspondence among a state immediately before the sleep state, a communication state with an AP at the time of releasing the sleep state, and a lock screen; and

FIG. 10 is a flowchart showing an operation of a portable terminal apparatus according to a third embodiment.

DETAILED DESCRIPTION OF PREFERRED EMBODIMENTS

Each embodiment will be described below with reference to the accompanying drawings.

First Embodiment

5 FIG. 1 is a block diagram showing an example of an internal configuration of a portable terminal apparatus 100 according to a first embodiment.

 Here, a smartphone will be described by way of example. The portable terminal apparatus 100 is constituted by appropriately
10 using a base station communication unit 101, a CPU 102, a memory 103, a storage 104, a GPS (Global Positioning System) receiving unit 105, a geomagnetic sensor 106, an acceleration sensor 107, a gyro sensor 108, an input/output I/F 109, a wireless communication unit 110, a microphone 111, a sound processing unit 112, a speaker 113,
15 an operation input unit 114, a display unit 115, a touch panel 116, an image processing unit 117, a video input unit 118, and an operation button 119. The respective units are mutually connected to a bus 150. Note that the respective functional units may be integrally or separately formed as needed.

20 The base station communication unit 101 is a communication interface which performs long-distance wireless communication with a base station (not shown) such as a W-CDMA (Wideband Code Division Multiple Access) base station or GSM (Global System for Mobile communications (registered trademark)) base station.

25 The CPU 102 controls the respective configuration units by executing a program stored in the memory 103 and performs various types of processing.

 The memory 103 is, for example, a flash memory, which stores

a program, data, and the like. The base station communication unit 101 performs wireless communication with a base station 500 to download a program to be stored in the memory 103 from an external server and the like (not shown) and accordingly, the program can
5 be updated or a new program can be added, as needed. In addition, the portable terminal apparatus 100 includes the storage 104 such as a memory card, as needed, and can save data and the like in the storage 104.

10 The GPS receiving unit 105 receives a signal from a GPS satellite in the sky. This makes it possible to detect a current position of the portable terminal apparatus 100.

The geomagnetic sensor 106 is a sensor detecting the direction in which the portable terminal apparatus 100 is oriented. The acceleration sensor 107 is a sensor detecting an acceleration of
15 the portable terminal apparatus 100. The gyro sensor 108 is a sensor detecting an angular velocity of the portable terminal apparatus 100. By using these sensors, a tilt and movement of the portable terminal apparatus 100 can be precisely detected.

The input/output I/F 109 is, for example, a USB (Universal
20 Serial Bus), which is an interface for transmitting and receiving data to and from an external device (not shown). The wireless communication unit 110 is a communication interface which performs near field wireless communication, and uses, as a communication scheme, for example, a wireless LAN such as IEEE802.11a/b/n,
25 Bluetooth (registered trademark) communication, or infrared communication.

The microphone 111 receives an external sound. The speaker 113 outputs a sound to the outside. The sound processing unit 112

processes input and output sounds. The touch panel 116 is constituted by appropriately using the operation input unit 114 and the display unit 115. The display unit 115 is a liquid crystal panel or the like, which displays a video and an image. A display screen
5 of the display unit 115 has the operation input unit 114 such as a touch pad.

The operation input unit 114 is, for example, a touch pad such as a capacitive touch pad and detects a contact operation (to be referred to as a touch, hereinafter) with a finger or a touch pen.
10 For example, the display unit 115 displays a command (function) menu or the like, and the user then selects a desired command by touch. Accordingly, the operation input unit 114 detects the touch position to receive a command displayed at the touch position. The touch or the touch operation received by the operation input unit 114 is
15 input to the CPU 102 to be processed. Note that the operation input unit 114 may be configured to detect an approaching operation as well as the contact operation.

The video input unit 118 is, for example, a camera. A video displayed on the display unit 115 and a video input from the video
20 input unit 118 are processed by the image processing unit 117. The video input unit 118 may be provided on, for example, each of a first surface of the portable terminal apparatus 100 and a second surface as a back surface of the apparatus, and a plurality of video input units may be provided.

25 The operation button 119 is, for example, a push button switch. When pressing of the operation button 119 is detected, the corresponding information is input to the CPU 102, and an operation corresponding to the operation button 119 is executed. Note that

a plurality of operation buttons 119 may be used, and simultaneous operations with a plurality of operation buttons 119 or simultaneous operations with the operation input unit 114 and the operation button 119 may be received as one operation instruction.

5 FIG. 2 is a view showing a configuration example of an entire system when an electronic device is remotely controlled in the portable terminal apparatus 100. Here, the wireless communication unit 110 uses a wireless LAN as a communication scheme by way of example.

10 An electronic device 200 includes a television receiver (to be referred to as a TV, hereinafter), a recording/reproducing apparatus (to be referred to as a recorder, hereinafter) using an HDD (Hard Disk Drive), BD (Blu-ray (registered trademark) Disc), or DVD (Digital Versatile Disc) as a recording medium (to be referred
15 to as a storage, hereinafter), and a storage reproducing apparatus (to be referred to as a player, hereinafter). In addition, each of these apparatuses may be an in-car TV and the like which can connect to a network. In the following, a case in which the electronic device 200 is a TV will be described by way of example.

20 The electronic device 200 is connected to a home network 300 as a LAN (Local Area Network) implemented by IEEE802.3 Ethernet (registered trademark) or the like. The portable terminal apparatus 100 is connected to an access point (to be referred to as an AP, hereinafter) 201 via the wireless LAN. The AP 201 is
25 connected to the home network 300. The portable terminal apparatus 100 is connected to the home network 300 via the AP 201.

As described above, since the portable terminal apparatus 100 and the electronic device 200 are connected to the same home network

300, the portable terminal apparatus 100 and the electronic device 200 can communicate with each other via the home network 300. Therefore, the portable terminal apparatus 100 can remotely control the electronic device 200 by transmitting a remote control signal to the electronic device 200 via the home network 300.

An area 400 surrounded by the dotted line indicates a user area. The user area is a predetermined area such as a home or an office used by the user. As illustrated in the drawing, a router 301 is connected to an external network 310 such as the Internet, and the portable terminal apparatus 100, the electronic device 200, and the like arranged in the user area 400 can mutually communicate with the external network 310 via the router 301.

The portable terminal apparatus 100 is connected to the AP 201 via the wireless LAN, as described above. That is, when the portable terminal apparatus 100 can communicate with the AP 201, the portable terminal apparatus 100 can be considered to be located in the user area 400. When the portable terminal apparatus 100 cannot communicate with the AP 201, the portable terminal apparatus 100 can be considered to be located outside the user area 400, for example, at a place outside the home.

In addition, the portable terminal apparatus 100 can wirelessly communicate with the base station 500. The portable terminal apparatus 100 can also mutually communicate with the external network 310 via the base station 500. As described above, since the home network 300 is also connected to the external network 310 via the router 301, the portable terminal apparatus 100 can also communicate with the electronic device 200 via the base station 500, the external network 310, the router 301, and the home network 300.

As described above, the portable terminal apparatus 100 can remotely control the electronic device 200 via the home network 300. FIG. 3 is a view showing a display example of the portable terminal apparatus 100 when the electronic device 200 (TV) is remotely controlled by using the portable terminal apparatus 100.

As shown in FIG. 3, the display unit 115 displays remote control buttons 160 such as a broadcast wave selection button 161, a cursor button 162, an enter button 163, a program guide display button 164, a volume control button 165, and a channel selection button 166, as needed. In this case, various types of buttons displayed on the display unit 115 are not limited to those shown in FIG. 3, and may be those using icons expressed by pictures and symbols.

The user performs a touch operation on the desired remote control button 160. The touch panel 116 detects the touch position on the touch panel 116 and transmits the detected information to the CPU 102. The CPU 102 generates a control command corresponding to the remote control button 160 displayed at the touch position based on the detected information. In this case, correspondence table data between various types of remote control buttons and control commands is stored in the memory 103. The CPU 102 transmits the generated control command from the wireless communication unit 110 to the electronic device 200. In this manner, the portable terminal apparatus 100 can remotely control the electronic device 200.

When, for example, performing an operation for selecting a program to be viewed, the user selects the program guide display button 164 by touch, displays a program guide on the screen of the

electronic device 200 (TV), selects a desired program to be viewed with the cursor button 162, selects the enter button 163 by touch, and makes the current program switch to the selected program (channel), thereby allowing the user to view the program.

5 In this manner, although the user sometimes continuously performs a plurality of remote control operations, the user often performs a remote control operation after a few minutes or more has passed since a previous remote control operation such as a remote control operation when performing volume control during viewing or
10 selecting a next program to be viewed after the end of a viewed program. Here, in general, in order to suppress battery consumption, a portable terminal apparatus is set to be put into the sleep state when a predetermined time (e.g., 30 seconds) of a non-operation state passes. When the above predetermined time has passed since a
15 previous remote control operation, since the portable terminal apparatus is in the sleep state, it is necessary to start up the portable terminal apparatus before performing a remote control operation.

FIG. 4 is views for explaining the operation of starting up
20 a conventional portable terminal apparatus 100' from a sleep state. When the user presses an operation button 119' in the sleep state, the apparatus displays a screen on which a lock release button 170' is displayed on a display unit 115', as shown in FIG. 4(a), for example. This state is called a lock screen. As shown in FIG. 4(b),
25 for example, when the user touches the lock release button 170' and transversely slides it with his/her finger, the current screen shifts to a password input screen like that shown in FIG. 4(c), for example.

In this case, the user inputs a password. When the input password matches a preset password, the lock is released, and the home screen appears (FIG. 4(d)) to allow the user to use the apparatus. When the user selects a remote control icon 180' on the home screen by touch, a remote control screen like that shown in FIG. 3 appears to allow the user to perform remote control of the electronic device 200. That is, when a predetermined time has passed since a previous operation, the portable terminal apparatus 100' is set to the sleep state, as described above. When performing remote control of the electronic device 200 again, it is necessary to perform the above lock release operation, and as a result, there is a problem that the apparatus is poor in operability.

In consideration of this problem, the portable terminal apparatus 100 according to the present embodiment performs an operation described below.

FIG. 5 is a flowchart showing the operation of the portable terminal apparatus 100 according to the present embodiment.

The operation in the flowchart shown in FIG. 5 starts when the portable terminal apparatus 100 in the sleep state is released from a sleep mode by pressing the operation button 119, for example.

When the operation starts, an activation status of the wireless LAN is checked (step S501). Since the portable terminal apparatus 100 is configured to allow for ON/OFF setting of the wireless LAN function, it is checked whether the wireless LAN function is ON. When the wireless LAN function is OFF (NO in step S501), the portable terminal apparatus 100 moves to step S510 to start up on a normal lock screen and then moves to step S511 to check whether the lock release operation is selected.

FIG. 6 is views showing an example of the lock screen of the portable terminal apparatus 100 according to the present embodiment. FIG. 6(a) shows an example of the normal lock screen displayed in step S510 described above. As shown in the drawing, only a lock release button 170 is displayed on the touch panel 116. In this state, when the user touches the lock release button 170 and transversely slides it with his/her finger, the lock release operation is selected (YES in step S511), and the lock function is released. The process then moves to step S507 to display an authentication screen. The authentication screen will be described in detail later.

In step S511 to check whether the lock release operation is selected, when the user does not select the lock release operation (NO in step S511), the process returns to step S510 to check the activation status of the wireless LAN.

In step S501 to check the activation status of the wireless LAN, when the wireless LAN function is ON (YES in step S501), it is checked whether it is possible to communicate with the AP 201 (step S502). Wireless LAN communication with the AP 201 is performed through authentication and encryption to prevent unauthorized communication by a third party. An encryption scheme used includes WEP (Wired Equivalent Privacy), WPA (WiFi Protected Access), and WPA2.

In step S502 to check whether it is possible to communicate with the AP 201, when it is not possible to communication with the AP 201 (NO in step S502), the process moves to step S510 to start up on the normal lock screen and then moves to step S511 to check whether the lock release operation is selected, as in the case in

which the above wireless LAN function is OFF (NO in step S501).

In step S502 to check whether it is possible to communicate with the AP 201, when it is possible to communicate with the AP 201 (YES in step S502), it is determined that remote control can be performed. The process moves to step S503 to start up a remote control display lock screen and then moves to step S504 to check whether the remote control button 160 is selected. FIG. 6(b) shows an example of the above remote control display lock screen. As shown in FIG. 6(b), the lock release button 170 and the remote control button 160 are displayed on the touch panel 116.

In step S504 to check whether the remote control button 160 is selected, when the user selects the desired remote control button 160 by touch (YES in step S504), the remote control signal corresponding to the remote control button 160 touched by the user is transmitted to the electronic device 200 (step S505). The process then moves to step S511 to check whether the lock release operation is selected.

In step S504 to check whether the remote control button 160 is selected, when no remote control button is selected (NO in step S504), the process moves to step S506 to check whether the lock release operation is selected.

In step S506 to check whether the lock release operation is selected, as shown in FIG. 6(c), for example, when the user touches the lock release button 170 and transversely slides it with his/her finger so as to select the lock release operation (YES in step S506), the lock function is released, and the process moves to step S507 to display the authentication screen. When the lock release operation is not selected (NO in step S506), the process returns

to step S504 to check whether a remote control button is selected.

An authentication screen displayed in step S507 is a password input screen like that shown in FIG. 6(d), for example. When the user inputs a password on this screen, the process moves to step
5 S508 to perform authentication. In step S508, it is checked whether the password input by the user matches a preset password. If the password matches the preset password (authentication is OK; YES in step S508), the home screen is displayed (step S509), and the processing ends. When the password does not match the preset
10 password (authentication is NG; NO in step S508), the process returns to step S501 to check the first activation status of the wireless LAN.

As described above, according to the portable terminal apparatus 100 according to the present embodiment, there can be
15 provided a portable terminal apparatus having high operability as a remote controller while ensuring security performance because the remote control buttons 160 are displayed to remotely control an electronic device without performing lock release processing, as shown in FIG. 6(b).

20 Note that the display example of the remote control buttons 160 before lock release processing is not limited to that shown in FIG. 6(b) and can be variously changed. The remote control buttons 160 need not always be displayed simultaneously with the lock release button. In addition, assume that a button which allows the user
25 to select whether to display the remote control buttons is temporarily displayed together with the lock release button 170. In this case, when the user selects to display the remote control buttons 160, the remote control buttons 160 may be displayed.

FIG. 7 is a table summarizing a correspondence between a state at the time of releasing the sleep state and a lock screen.

The first case is a case in which the LAN function of the portable terminal apparatus 100 is OFF at the time of releasing the sleep state. In this case, the apparatus is started up with the normal lock screen being displayed on the touch panel 116. This is a state in which the user intentionally sets the wireless LAN function OFF. In remote control of the electronic device 200 with the portable terminal apparatus 100, the portable terminal apparatus 100 communicates with the electronic device 200 via a wireless LAN. That is, setting the wireless LAN function OFF indicates that the user has no intention to remotely control the electronic device 200. Therefore, there is no problem in starting up the apparatus with the normal lock screen.

The second case is a case in which the wireless LAN function is ON at the time of releasing the sleep state, but the portable terminal apparatus 100 cannot communicate with the AP 201. In this case as well, the apparatus is started up with the normal lock screen being displayed on the touch panel 116. This is, for example, a case in which the user uses the portable terminal apparatus 100 outside the home. This state indicates that the portable terminal apparatus 100 is located outside a communication range with the AP 201. The user who is operating the portable terminal apparatus 100 is also located outside the communication range with the AP 201 and hence, is not located near the electronic device 200.

In such a state, the user does not remotely control the electronic device 200, and hence, there is no problem in starting up the apparatus on the normal lock screen. In contrast, in this

state, if the user starts up the apparatus on a remote control display lock screen, the remote control screen which cannot be used is displayed, and as a result, the apparatus is poor in operability.

The third case is a case in which the wireless LAN function is ON at the time of releasing the sleep state, and the portable terminal apparatus 100 can communicate with the AP 201. In this case, the user starts up the apparatus on the remote control display lock screen on the touch panel 116. When the portable terminal apparatus 100 is located in the communication range with the AP 201, it can be considered that the user is located in the user area 400. Therefore, the user who is operating the portable terminal apparatus 100 is likely to be located near the electronic device 200.

In this case, since the user is likely to have released the sleep mode of the portable terminal apparatus 100 to remotely control the electronic device 200, starting up the apparatus on the remote control display lock screen allows the user to quickly perform a remote control. This leads to high operability. In addition, when wanting to perform an operation other than a remote control operation, the user touches the lock release button 170 with his/her finger and transversely slides it, as in the case of the normal lock screen, and then, through authentication processing, the lock function is released, so that the user can use the apparatus.

As described above, the portable terminal apparatus 100 according to the present embodiment displays the remote control screen when it is possible to communicate with the AP 201, and hence, there is no chance to display the unnecessary remote control display lock screen in a case in which the user releases the sleep mode when he/she is away from the AP 201, such as when he/she is outside the

home.

As described above, when controlling the electronic device 200 by transmitting a remote control signal thereto via the wireless LAN, the portable terminal apparatus 100 needs to be communicative
5 with the AP 201 when transmitting the remote control signal. In the present embodiment, in step S502, the portable terminal apparatus 100 checks whether it can communicate with the AP 201, and transmits a remote control signal only when it is possible to communicate with the AP 201 (step S505). This makes it possible
10 to reliably transmit a remote control signal to the electronic device 200.

In addition, as described above, in the portable terminal apparatus 100 according to the present embodiment, even when the third party releases the sleep mode, the remote control display lock
15 screen may be displayed. However, the remote control display lock screen is displayed only when it is possible to communicate with the AP 201. In addition, since only the remote control buttons 160 are permitted to be operated, it is very unlikely to cause a security problem.

20 Second Embodiment

A portable terminal apparatus 100 according to the second embodiment will be described.

Since the internal configuration, outer appearance, and the like of the portable terminal apparatus 100 are the same as those
25 according to the first embodiment, a description will be omitted. Therefore, the first embodiment will be referred to, as needed.

FIG. 8 is a flowchart showing an operation of the portable terminal apparatus 100 according to the second embodiment. The same

reference characters denote the same steps of operations as in the first embodiment, and a detailed description will be omitted.

The operations in the flowchart shown in FIG. 8 start when the user releases the sleep mode by pressing an operation button 119 or the like while the portable terminal apparatus 100 is in the sleep state, as in the first embodiment.

When the operations start, the state of the portable terminal apparatus 100 immediately before the sleep state is checked (step S801). If a remote control screen has been displayed immediately before the sleep state (YES in step S801), the process moves to step S502 to check whether it is possible to communicate with an AP 201. If the remote control screen has not been displayed immediately before the sleep state (NO in step S801), the process moves to step S510 to start up the apparatus on the normal lock screen. Since operations after step S502 to check whether it is possible to communicate with the AP 201 and operations after step S510 in which the apparatus is started up on the normal lock screen are the same as those in the first embodiment, a detailed description will be omitted.

FIG. 9 is a table summarizing a correspondence among a state immediately before the sleep state, a communication state with an AP 201 at the time of releasing the sleep state, and a lock screen.

The first case is a case in which a state immediately before the sleep state is a state in which the remote control screen has not been displayed. That is, immediately before the sleep state, the apparatus has performed an operation other than a program for remote control. In this case, the apparatus is started up with the normal lock screen being displayed on a touch panel 116.

The second case is a case in which a state immediately before the sleep state is a state in which the remote control screen has been displayed and it is not possible to communicate with the AP 201. In this case, the apparatus is started up with the normal lock screen being displayed on the touch panel 116. This is, for example, a case in which, although the remote control screen has been displayed immediately before the sleep state and the user has performed a remote control operation, the user has carried the portable terminal apparatus 100 outside in the sleep state. Since the user who is operating the portable terminal apparatus 100 is also located outside the communication range with the AP 201, he/she is not located near an electronic device 200. In such a state, the user does not perform any remote control operation of the electronic device 200, and accordingly, there is no problem in starting up the apparatus on the normal lock screen. In contrast, in this state, if the apparatus is started up on the remote control display lock screen, the remote control screen which cannot be used is displayed, and as a result, the apparatus is poor in operability.

The third case is a case in which a state immediately before the sleep state is a state in which the remote control screen has been displayed and it is also possible to communicate with the AP 201. In this case, the apparatus is started up with the remote control display lock screen being displayed on the touch panel 116. When the portable terminal apparatus 100 is located inside the communication range with the AP 201, it indicates that the user who is operating the portable terminal apparatus 100 is located near the electronic device 200. Since it is very likely that the user has released the sleep mode of the portable terminal apparatus 100

to remotely control the electronic device 200, starting up the apparatus on the remote control display lock screen allows the user to quickly perform a remote control operation. This improves the operability.

5 In addition, when wanting to perform an operation other than a remote control operation, the user touches the lock release button 170 with his/her finger and transversely slides it, as in the case of the normal lock screen, and then, through authentication processing, the lock function is released, so that the user can use
10 the apparatus.

Third Embodiment

A portable terminal apparatus 100 according to the third embodiment will be described.

15 Since the internal configuration, outer appearance, and the like of the portable terminal apparatus 100 are the same as those according to the first and second embodiments, a description will be omitted. Therefore, the first and second embodiments will be referred to, as needed.

20 FIG. 10 is a flowchart showing an operation of the portable terminal apparatus 100 according to the third embodiment. The same reference characters denote the same steps of operations as in the first embodiment, and a detailed description will be omitted.

25 The operations in the flowchart shown in FIG. 10 start when the user releases the sleep mode by pressing an operation button 119 or the like while the portable terminal apparatus 100 is in the sleep state, as in the first embodiment.

When the operations start, current position information is acquired by a GPS receiving unit 105 (step S1001). If the current

position is near a predetermined position (YES in step S1002), the process moves to step S502 to check whether it is possible to communicate with the AP 201. If the current position is not near the predetermined position (NO in step S1002), the process moves
5 to step S510 to start up the apparatus on the normal lock screen. Since operations after step S502 to check whether it is possible to communicate with the AP 201 and operations after step S510 in which the apparatus is started up on the normal lock screen are the same as those in the first embodiment, a detailed description will
10 be omitted.

In this case, the predetermined position is nearly the position of an electronic device 200. In order to acquire the position information of the electronic device 200, the portable terminal apparatus 100 may be placed near the electronic device 200
15 in advance to acquire the current position information with the GPS receiving unit 105. The acquired position information is recorded in a storage 104 in advance. That is, when the portable terminal apparatus 100 is located near the predetermined position, it means that the portable terminal apparatus 100 is located in a user area
20 400.

Note that, in the above embodiment, in step S502 to determine whether it is possible to communicate with an AP 201, when the apparatus cannot communicate with the AP 201 (NO in step S502), the apparatus is started up on the normal lock screen (step S510).
25 However, the apparatus may be started up on the remote control display lock screen in a mode of communicating with the electronic device 200 via the base station 500, the external network 310, the router 301, and the home network 300 by wirelessly communicating

with the base station 500. Alternatively, the apparatus may be started up on the remote control display lock screen by directly communicating with the electronic device 200 by Bluetooth (registered trademark) or infrared light.

5 Alternatively, as described in the second embodiment, the startup modes may be switched in accordance with the state of the apparatus before the sleep state.

 Note that the present invention includes various modifications and is not limited to the embodiments. For example,
10 the embodiments are described in detail to simplify the description of the present invention. Thus, it is not always necessary to provide all the described configurations. Alternatively, the configurations of the embodiments may partially allow the addition of other configurations, deletion, and replacement. In addition,
15 it is also possible to use each embodiment in combination as needed within the scope of the technical idea.

 As an example of combining the respective embodiments, when it is determined whether an electronic device can be remotely controlled, such a process may be performed that, after checking
20 ON/OFF of the wireless LAN function as described in the first embodiment, the state of the portable terminal apparatus 100 immediately before the sleep state as described in the second embodiment is checked.

 In addition, as a modification, for example, ON/OFF of remote
25 control display may be set in advance by the user, and the above control operations described in each embodiment may be performed only when ON setting is made.

 In addition, the respective configurations, functions,

processing units, processing methods, and the like described above may be partly or totally implemented by hardware by, for example, designing them with integrated circuits. Alternatively, the respective configurations, functions, and the like described above may be implemented by software by making a processor interpret and execute programs implementing the respective functions. Information such as programs, tables, and files which implement the respective functions can be stored in a memory such as a flash memory or a storage such as a memory card.

Furthermore, the control lines and information lines shown are those considered to be necessary for the description, and all the control lines and information lines are not necessarily illustrated in terms of a product. In practice, almost all the configurations may be considered to be connected to each other.

EXPLANATION OF REFERENCE CHARACTERS

100 ... portable terminal apparatus, 115 ... display unit, 116 ... touch panel, 119 ... operation button, 200 ... electronic device, 201 ... access point.

CLAIMS

1. A portable terminal apparatus comprising:

a display unit displaying an image;

5 an operation input unit inputting a user operation;

a wireless communication unit performing wireless communication by a wireless LAN; and

a controller programmed to perform:

a first display mode to display a lock release button
10 without displaying a remote control button on the display unit when the portable terminal apparatus starts up from a sleep state on condition that before the portable terminal apparatus enters the sleep state, a remote control screen for remotely controlling an external device via the wireless communication unit is not displayed
15 on the display unit;

a second display mode to display the lock release button without displaying the remote control button on the display unit when the portable terminal apparatus starts up from the sleep state on condition that (1) the wireless communication unit is not able
20 to communicate with an external device, and (2) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed on the display unit; and

a third display mode to display the remote control button and the lock release button on the display unit when the
25 portable terminal apparatus starts up from the sleep state on condition that (3) the wireless communication unit is able to communicate with the external device, and (4) before the portable terminal apparatus enters the sleep state, the remote control screen

is displayed on the display unit, wherein

when the lock release button is selected in one of the first to third display modes, the control unit displays a screen for performing authentication of a lock release process on the display unit, and

when the remote control button is selected in the third display mode without selecting the lock release button, the wireless communication unit transmits a remote control signal corresponding to the selected remote control button to the external device.

2. The portable terminal apparatus according to claim 1, further comprising a GPS receiver acquiring a position, wherein

the controller is programmed to perform the third display mode to display the remote control button and the lock release button on the display unit when the portable terminal apparatus starts up from the sleep state on condition that (3) the wireless communication unit is able to communicate with the external device, (4) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed, and (5) the GPS receiver acquires a position indicating that the portable terminal apparatus is located near a predetermined position.

3. A method for controlling a portable terminal apparatus comprising:

performing a first display mode to display a lock release button without displaying a remote control button on a display when the portable terminal apparatus starts up from a sleep state on condition that before the portable terminal apparatus enters the

sleep state, a remote control screen for remotely controlling an external device is not displayed on the display;

performing a second display mode to display the lock release button without displaying the remote control button on the display when the portable terminal apparatus starts up from the sleep state on condition that (1) the portable terminal apparatus is able to communicate with an external device, and (2) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed on the display;

performing a third display mode to display the remote control button and the lock release button on the display when the portable terminal apparatus starts up from the sleep state on condition that (3) the portable terminal apparatus is able to communicate with the external device, and (4) before the portable terminal apparatus enters the sleep state, the remote control screen is displayed on the display;

when the lock release button is selected in one of the first to third display modes, displaying a screen for performing authentication of a lock release process on the display unit; and

when the remote control button is selected in the third display mode without selecting the lock release button, transmitting a remote control signal corresponding to the selected remote control button to the external device.

4. The method according to claim 3, wherein performing the third display mode requires an additional condition that the portable terminal apparatus is located near a predetermined position.

ABSTRACT

A portable terminal apparatus includes a display unit displaying an image, an operation input unit inputting a user operation, and a wireless communication unit performing wireless communication by a wireless LAN, and at a time of startup from a sleep state, a remote control button is displayed on the display unit when a mutual communication with a predetermined access point can be performed in the wireless communication unit, and when the remote control button is selected, a remote control signal corresponding to the selected remote control button is transmitted.

FIG. 1

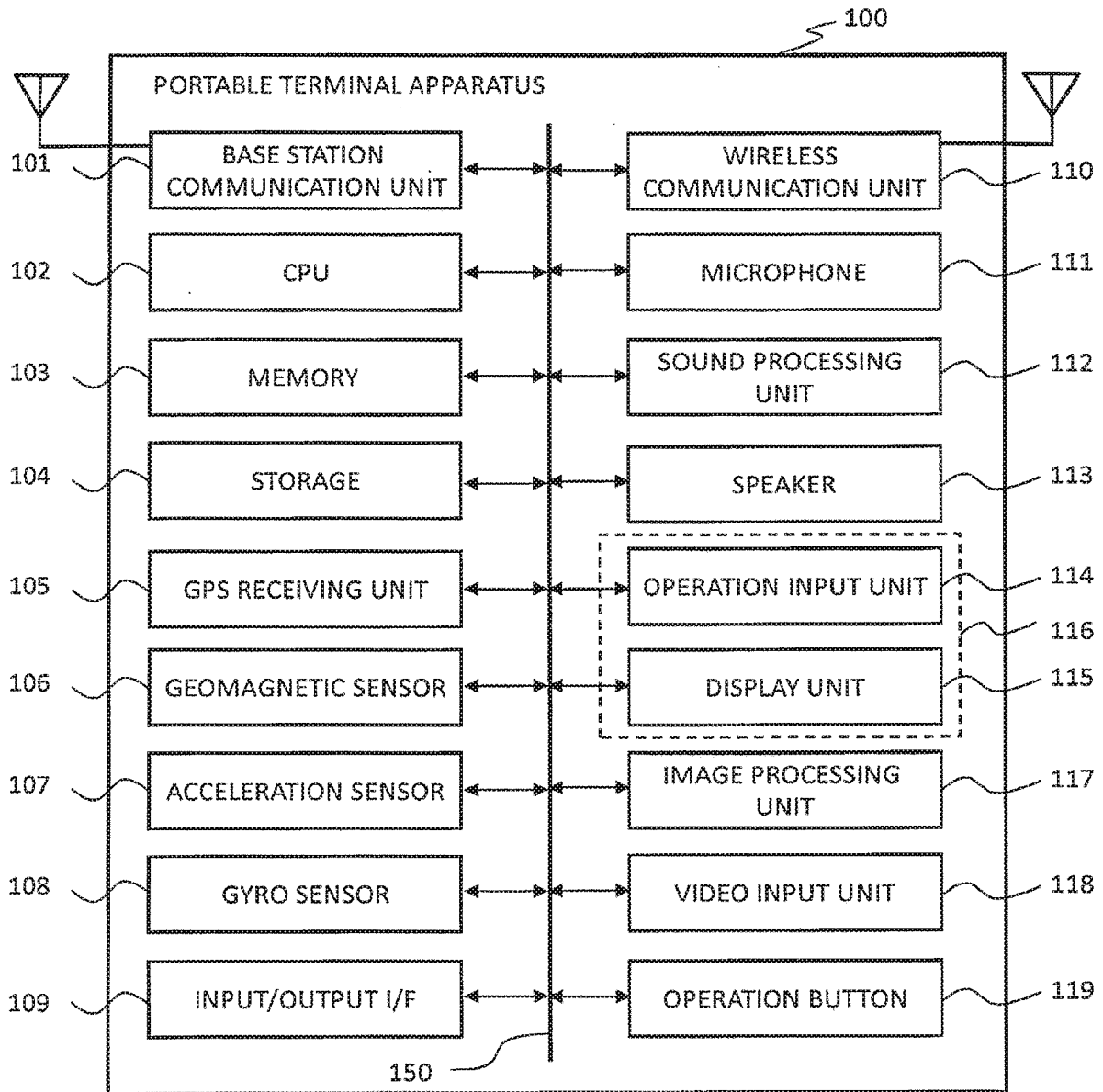


FIG. 2

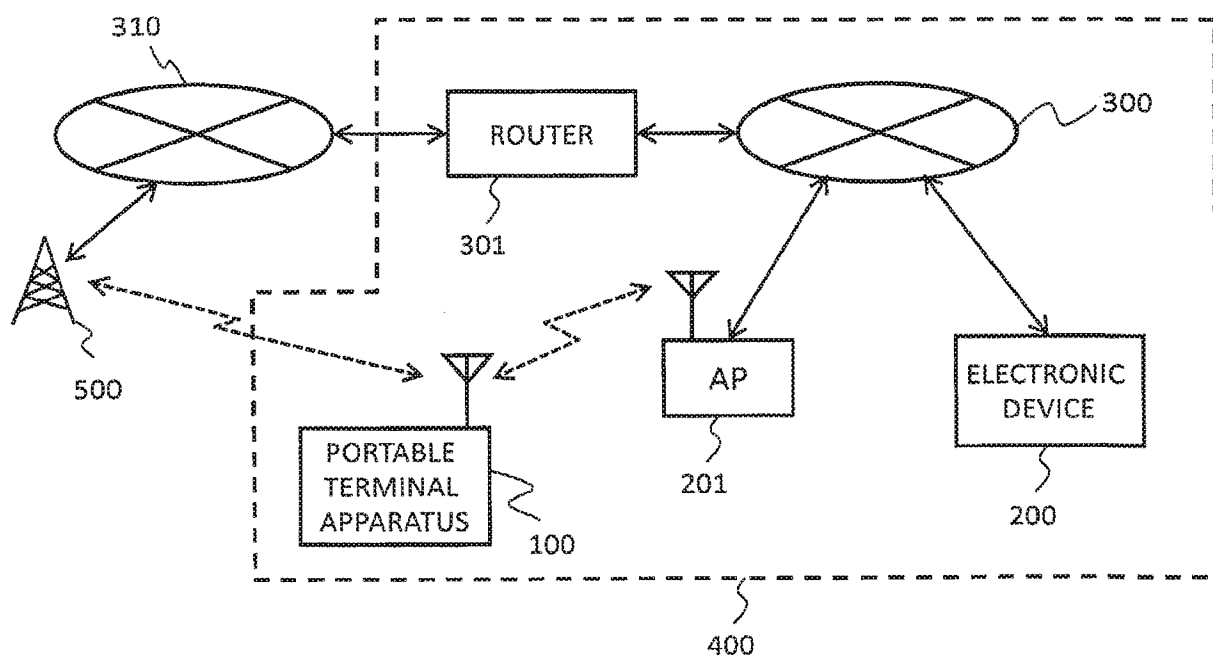
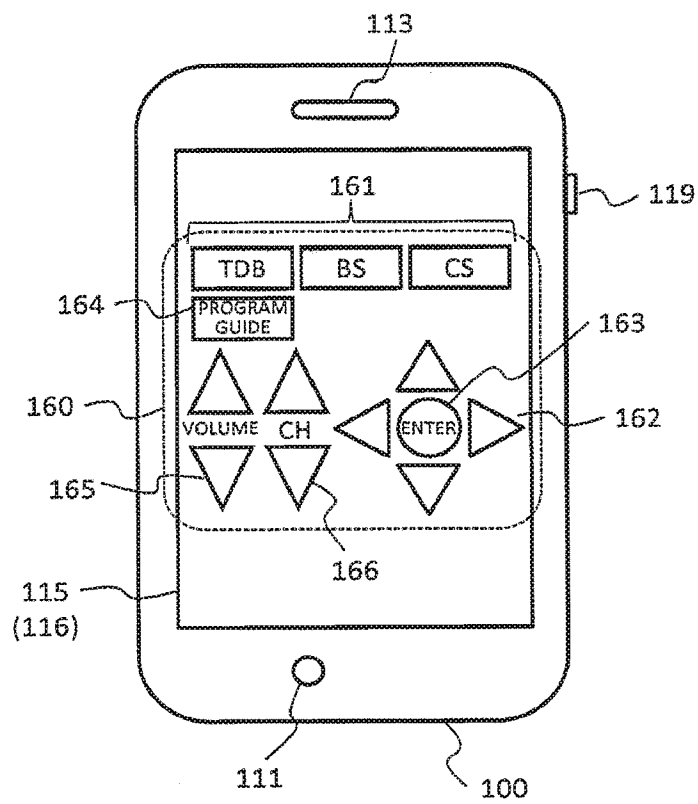


FIG. 3



3/9
FIG. 4

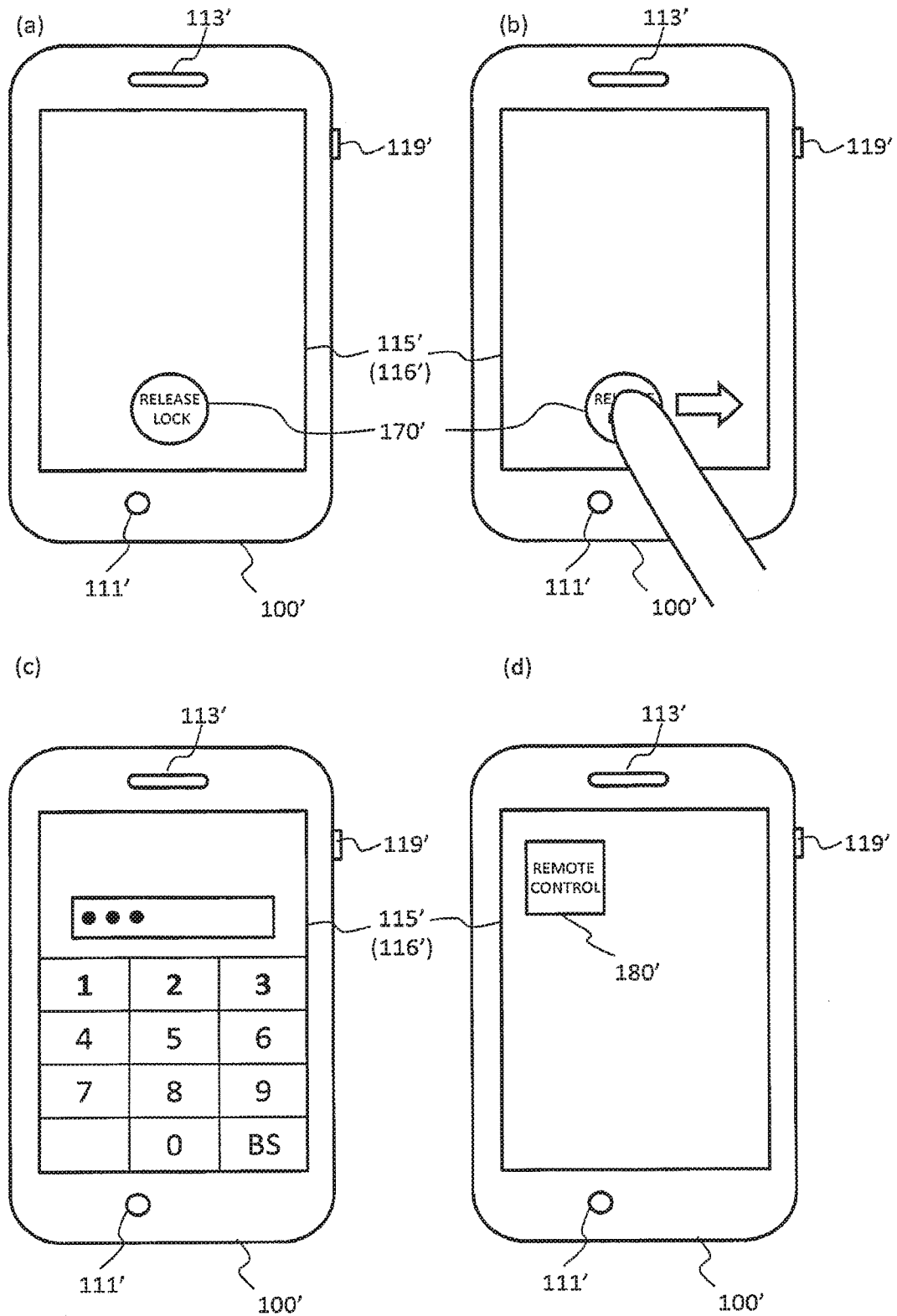
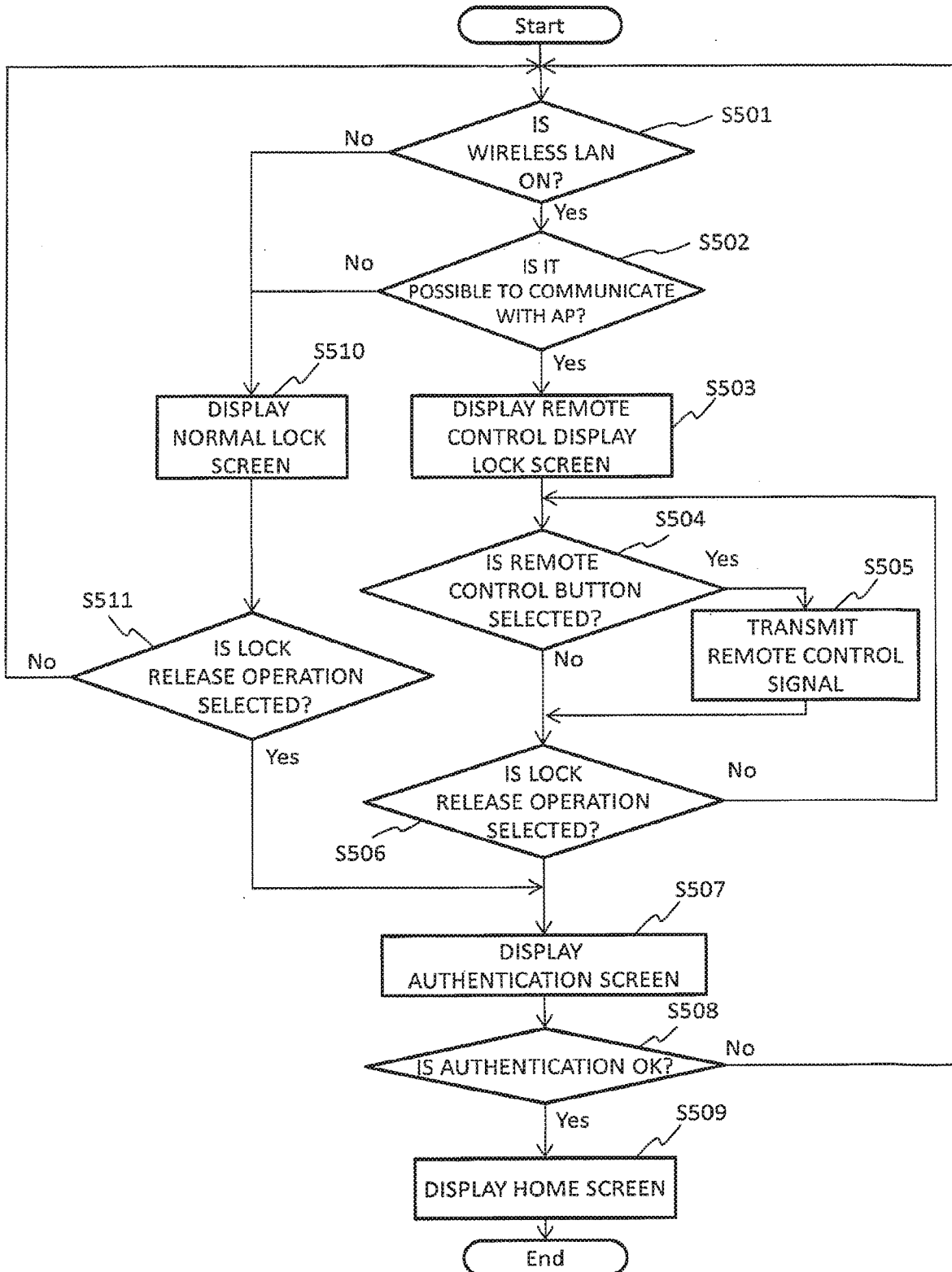
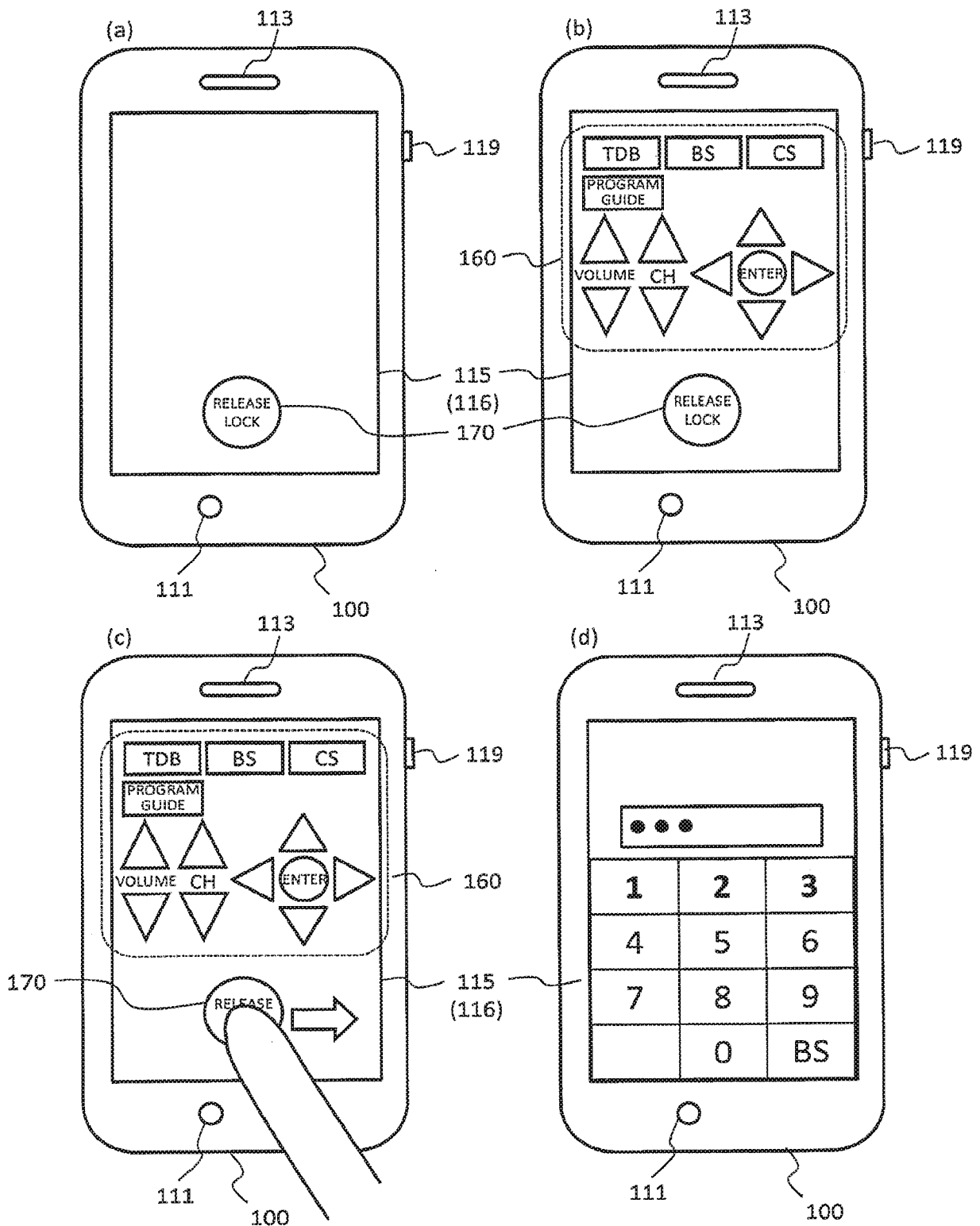


FIG. 5



5/9
FIG. 6

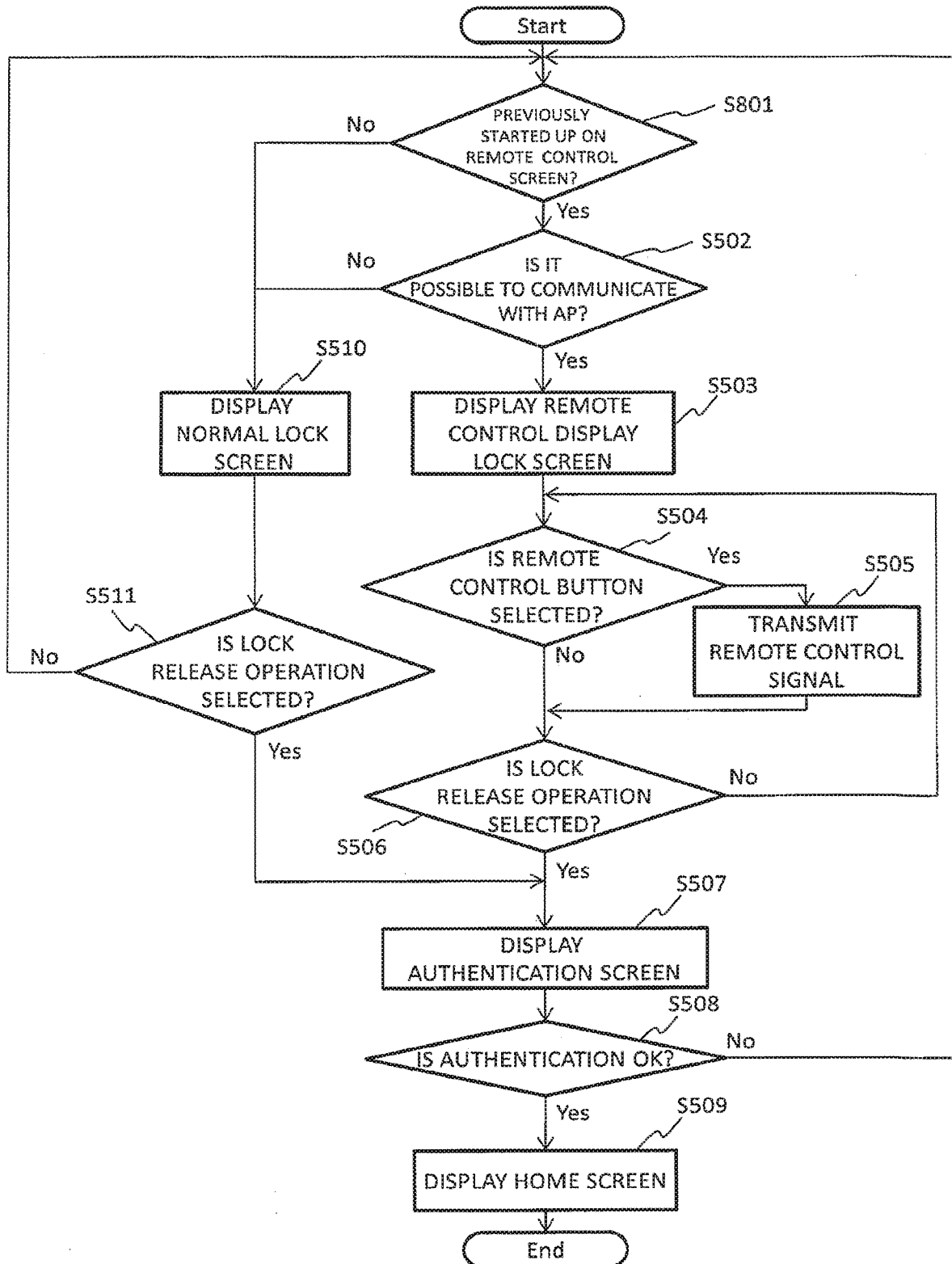


6/9

FIG. 7

	STATE AT TIME OF RELEASING SLEEP STATE		LOCK SCREEN
	WIRELESS LAN	COMMUNICATION WITH AP	
Case1	OFF	—	NORMAL
Case2	ON	IMPOSSIBLE	
Case3	ON	POSSIBLE	REMOTE CONTROL DISPLAY

FIG. 8

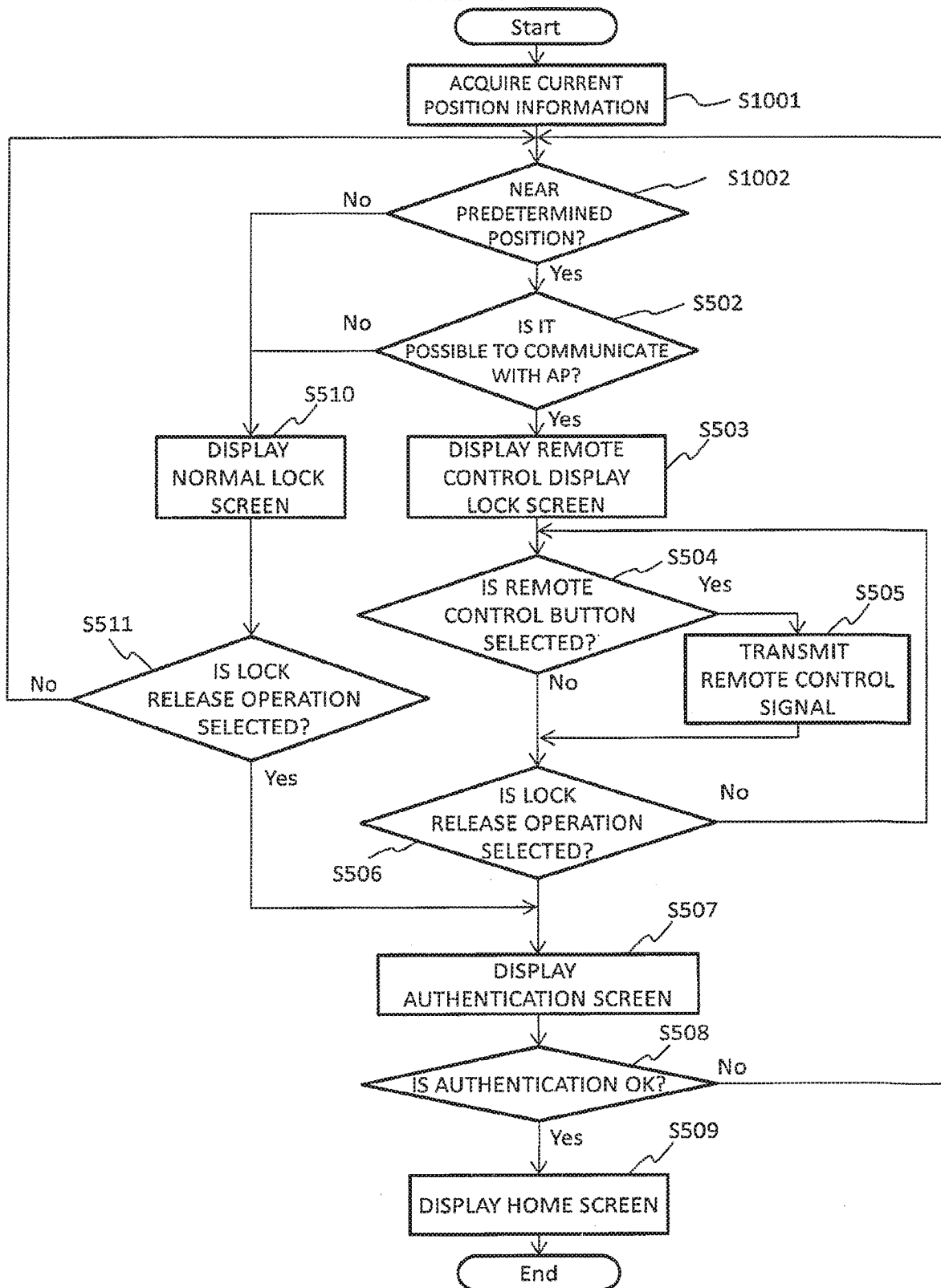


8/9

FIG. 9

	STATE BEFORE SLEEP STATE	COMMUNICATION WITH AP	LOCK SCREEN
Case1	OTHER THAN REMOTE CONTROL	-	NORMAL
Case2	REMOTE CONTROL	IMPOSSIBLE	
Case3	REMOTE CONTROL	POSSIBLE	REMOTE CONTROL DISPLAY

9/9
FIG. 10



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:	:	Customer Number: 20277
Nobuo MASUOKA et al.	:	
	:	
Application No.: Continuation of U.S. Patent	:	Confirmation No.: N/A
Application No. 16/370,233	:	
	:	
Filed: September 19, 2019	:	Art Unit: N/A
	:	
For: PORTABLE TERMINAL APPARATUS	:	Examiner: Not Yet Assigned

INFORMATION DISCLOSURE STATEMENT (IDS)

Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. § 1.56, 1.97 and 1.98, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom.

This Information Disclosure Statement accompanies the new patent application submitted herewith.

The documents cited in the attached form PTO/SB/08 are not supplied because they were previously cited by or submitted to the Office in prior application U.S. Serial No. 16/370,233, filed on March 29, 2019, and relied upon in this application for an earlier filing date under 35 U.S.C. § 120.

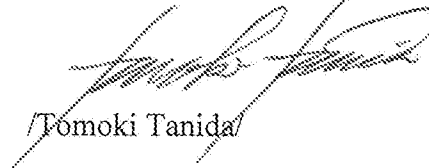
Application No.: Not Yet Assigned

Docket No.: 075425-0083

The Director is hereby authorized to charge any deficiency in the fees filed, asserted to be filed or which should have been filed herewith (or with any paper hereafter filed in this application by this firm) to our Deposit Account No. 50-0417, under Order No. 075425-0083.

Respectfully submitted,

MCDERMOTT WILL & EMERY LLP



/Tomoki Tanida/

Tomoki Tanida
Registration No. 60,453

500 North Capitol Street, N.W
Washington, DC 20001
Phone: (202) 756-8196 TT:rgf
Facsimile: (202) 756-8087
Date: September 19, 2019

**Please recognize our Customer No. 20277 as
our correspondence address.**

UTILITY PATENT APPLICATION TRANSMITTAL		Attorney Docket No. 075425-0083	
		First Named Inventor Nobuo MASUOKA	
		Title	PORTABLE TERMINAL APPARATUS
(Only for new nonprovisional applications under 37 CFR 1.53(b))		Priority Mail Express® Label No.	

APPLICATION ELEMENTS <i>See MPEP chapter 600 concerning utility patent application contents.</i> 1. ☒ Fee Transmittal Form (PTO/SB/17 or equivalent) 2. ☐ Applicant asserts small entity status. <i>See 37 CFR 1.27</i> 3. ☐ Applicant certifies micro entity status. <i>See 37 CFR 1.29.</i> <i>Applicant must attach form PTO/SB/15A or B or equivalent.</i> 4. ☒ Specification [Total Pages <u>30</u>] <i>Both the claims and abstract must start on a new page.</i> <i>(See MPEP § 608.01(a) for information on the preferred arrangement)</i> 5. ☒ Drawing(s) (35 U.S.C. 113) [Total Sheets <u>9</u>] 6. Inventor's Oath or Declaration [Total Pages <u>2</u>] <i>(including substitute statements under 37 CFR 1.64 and assignments serving as an oath or declaration under 37 CFR 1.63(e))</i> a. ☐ Newly executed (original or copy) b. ☒ A copy from a prior application (37 CFR 1.63(d)) 7. ☒ Application Data Sheet * <i>See note below.</i> <i>See 37 CFR 1.75 (PTO/AIA/14 or equivalent)</i> 8. CD-ROM or CD-R <i>in duplicate, large table, or Computer Program (Appendix)</i> ☐ Landscape Table on CD 9. Nucleotide and/or Amino Acid Sequence Submission <i>(if applicable, items a. – c. are required)</i> a. ☐ Computer Readable Form (CRF) b. ☐ Specification Sequence Listing on: i. ☐ CD-ROM or CD-R (2 copies); or ii. ☐ Paper c. ☐ Statements verifying identity of above copies	ADDRESS TO: Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 ACCOMPANYING APPLICATION PAPERS 10. ☐ Assignment Papers (cover sheet & document(s)) Name of Assignee MAXELL, LTD. 11. ☐ 37 CFR 3.73(c) Statement (when there is an assignee) ☒ Power of Attorney 12. ☐ English Translation Document (if applicable) 13. ☒ Information Disclosure Statement (PTO/SB/08 or PTO-1449) ☐ Copies of citations attached 14. ☐ Preliminary Amendment 15. ☐ Return Receipt Postcard (MPEP § 503) (Should be specifically itemized) 16. ☐ Certified Copy of Priority Document(s) (if foreign priority is claimed) 17. ☐ Nonpublication Request <i>Under 35 U.S.C. 122(b)(2)(B)(i). Applicant must attach form PTO/SB/35 or equivalent.</i> 18. ☐ Other:
--	--

***Note:** (1) Benefit claims under 37 CFR 1.78 and foreign priority claims under 1.55 must be included in an Application Data Sheet (ADS).
(2) For applications filed under 35 U.S.C. 111, the application must contain an ADS specifying the applicant if the applicant is an assignee, person to whom the inventor is under an obligation to assign, or person who otherwise shows sufficient proprietary interest in the matter. See 37 CFR 1.46(b).

19. CORRESPONDENCE ADDRESS			
☒ The address associated with Customer Number: <u>20277</u> OR ☐ Correspondence address below			
Name			
Address			
City	State	Zip Code	
Country	Telephone	Email	
Signature	/Tomoki Tanida/		Date
Name (Print/Type)	Tomoki Tanida		September 19, 2019
			Registration No. (Attorney/Agent)
			60,453

Under the Paperwork Reduction Act of 1995 no persons are required to respond to a collection of information unless it displays a valid OMB control number.

FEE TRANSMITTAL		Complete if known	
☐ Applicant asserts small entity status. See 37 CFR 1.27. ☐ Applicant certifies micro entity status. See 37 CFR 1.29. Form PTO/SB/15A or B or equivalent must either be enclosed or have been submitted previously.		Application Number	Not Yet Assigned
		Filing Date	September 19, 2019
		First Named Inventor	Nobuo MASUOKA
		Examiner Name	Not Yet Assigned
		Art Unit	N/A
TOTAL AMOUNT OF PAYMENT (\$)		1,720.00	Practitioner Docket No. 075425-0083

METHOD OF PAYMENT (check all that apply)

☐ Check
 ☐ Credit Card
 ☐ Money Order
 ☐ None
 ☐ Other (please identify): _____

☒ Deposit Account
 Deposit Account Number: 50-0417
 Deposit Account Name: McDermott Will & Emery LLP

For the above-identified deposit account, the Director is hereby authorized to (check all that apply):

☒ Charge fee(s) indicated below
 ☐ Charge fee(s) indicated below, **except for the filing fee**
☒ Charge any additional fee(s) or underpayment of fee(s) under 37 CFR 1.16 and 1.17
 ☒ Credit any overpayment of fee(s)

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES (U = undiscounted fee; S = small entity fee; M = micro entity fee)

Application Type	FILING FEES			SEARCH FEES			EXAMINATION FEES			Fees Paid (\$)
	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	U (\$)	S (\$)	M (\$)	
Utility	300	150*	75	660	330	165	760	380	190	1,720.00
Design	200	100	50	160	80	40	600	300	150	
Plant	200	100	50	420	210	105	620	310	155	
Reissue	300	150	75	660	330	165	2,200	1,100	550	
Provisional	280	140	70	0	0	0	0	0	0	

* The \$150 small entity status filing fee for a utility application is further reduced to \$75 for a small entity status applicant who files the application via EFS-Web.

2. EXCESS CLAIM FEES

Fee Description	Undiscounted Fee (\$)	Small Entity Fee (\$)	Micro Entity Fee (\$)
Each claim over 20 (including Reissues)	100	50	25
Each independent claim over 3 (including Reissues)	460	230	115
Multiple dependent claims	820	410	205

Total Claims Extra Claims Fee (\$) Fee Paid (\$)
 4 - 20 or HP = _____ x _____ = _____

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims Extra Claims Fee (\$) Fee Paid (\$)
 2 - 3 or HP = _____ x _____ = _____

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$400 (\$200 for small entity) (\$100 for micro entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets Extra Sheets Number of each additional 50 or fraction thereof Fee (\$) Fee Paid (\$)
 _____ - 100 = _____ / 50 = _____ (round up to a whole number) x _____ = _____

4. OTHER FEE(S)

Non-English specification, \$130 fee (no small or micro entity discount) _____

Non-electronic filing fee under 37 CFR 1.16(t) for a utility application, \$400 fee (\$200 small or micro entity) _____

Other (e.g., late filing surcharge): _____

SUBMITTED BY

Signature	/Tomoki Tanida/	Registration No. (Attorney/Agent)	60,453	Telephone	(202) 756-8196
Name (Print/Type)	Tomoki Tanida	Date	September 19, 2019		

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		
The application data sheet is part of the provisional or nonprovisional application for which it is being submitted. The following form contains the bibliographic data arranged in a format specified by the United States Patent and Trademark Office as outlined in 37 CFR 1.76. This document may be completed electronically and submitted to the Office in electronic format using the Electronic Filing System (EFS) or the document may be printed and included in a paper filed application.			

Secrecy Order 37 CFR 5.2:

☐	Portions or all of the application associated with this Application Data Sheet may fall under a Secrecy Order pursuant to 37 CFR 5.2 (Paper filers only. Applications that fall under Secrecy Order may not be filed electronically.)
--------------------------	---

Inventor Information:

Inventor	1				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Nobuo		MASUOKA		
Residence Information (Select One) US Residency ● Non US Residency Active US Military Service					
City	Kyoto	Country of Residence ⁱ	JP		

Mailing Address of Inventor:

Address 1	c/o MAXELL LTD.				
Address 2	1, Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun				
City	Kyoto	State/Province			
Postal Code	618-8525	Country ⁱ	JP		

Inventor	2				Remove
Legal Name					
Prefix	Given Name	Middle Name	Family Name	Suffix	
	Yasunobu		HASHIMOTO		
Residence Information (Select One) US Residency ● Non US Residency Active US Military Service					
City	Kyoto	Country of Residence ⁱ	JP		

Mailing Address of Inventor:

Address 1	c/o MAXELL LTD.				
Address 2	1, Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun				
City	Kyoto	State/Province			
Postal Code	618-8525	Country ⁱ	JP		

All Inventors Must Be Listed - Additional Inventor Information blocks may be generated within this form by selecting the **Add** button.

Add

Correspondence Information:

IPR2025-01316; Samsung

Ex. 1002 - Page 158

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

Enter either Customer Number or complete the Correspondence Information section below.
For further information see 37 CFR 1.33(a).

☐ An Address is being provided for the correspondence information of this application.

Customer Number	20277		
Email Address	ipdocketmwe@mwe.com	Add Email	Remove Email

Application Information:

Title of the Invention	PORTABLE TERMINAL APPARATUS		
Attorney Docket Number	075425-0083	Small Entity Status Claimed	☐
Application Type	Nonprovisional		
Subject Matter	Utility		
Total Number of Drawing Sheets (if any)	9	Suggested Figure for Publication (if any)	

Filing By Reference:

Only complete this section when filing an application by reference under 35 U.S.C. 111(c) and 37 CFR 1.57(a). Do not complete this section if application papers including a specification and any drawings are being filed. Any domestic benefit or foreign priority information must be provided in the appropriate section(s) below (i.e., "Domestic Benefit/National Stage Information" and "Foreign Priority Information").

For the purposes of a filing date under 37 CFR 1.53(b), the description and any drawings of the present application are replaced by this reference to the previously filed application, subject to conditions and requirements of 37 CFR 1.57(a).

Application number of the previously filed application	Filing date (YYYY-MM-DD)	Intellectual Property Authority or Country

Publication Information:

☐ Request Early Publication (Fee required at time of Request 37 CFR 1.219)

☐ **Request Not to Publish.** I hereby request that the attached application not be published under 35 U.S.C. 122(b) and certify that the invention disclosed in the attached application **has not and will not** be the subject of an application filed in another country, or under a multilateral international agreement, that requires publication at eighteen months after filing.

Representative Information:

Representative information should be provided for all practitioners having a power of attorney in the application. Providing this information in the Application Data Sheet does not constitute a power of attorney in the application (see 37 CFR 1.32). Either enter Customer Number or complete the Representative Name section below. If both sections are completed the customer Number will be used for the Representative Information during processing.

Please Select One:	☒ Customer Number	☐ US Patent Practitioner	☐ Limited Recognition (37 CFR 11.9)
Customer Number	20277 IPR2025-01316: Samsung		

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

Domestic Benefit/National Stage Information:

This section allows for the applicant to either claim benefit under 35 U.S.C. 119(e), 120, 121, 365(c), or 386(c) or indicate National Stage entry from a PCT application. Providing benefit claim information in the Application Data Sheet constitutes the specific reference required by 35 U.S.C. 119(e) or 120, and 37 CFR 1.78.

When referring to the current application, please leave the "Application Number" field blank.

Prior Application Status	Pending		Remove		
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
	Continuation of	16/370233	2019-03-29		
Prior Application Status	Patented		Remove		
Application Number	Continuity Type	Prior Application Number	Filing Date (YYYY-MM-DD)	Patent Number	Issue Date (YYYY-MM-DD)
16370233	Continuation of	15/326365	2017-01-13	10298737	2019-05-21
Prior Application Status	Expired		Remove		
Application Number	Continuity Type	Prior Application Number	Filing or 371(c) Date (YYYY-MM-DD)		
15/326365	a 371 of international	PCT/JP2014/068826	2014-07-15		
Additional Domestic Benefit/National Stage Data may be generated within this form by selecting the Add button.					Add

Foreign Priority Information:

This section allows for the applicant to claim priority to a foreign application. Providing this information in the application data sheet constitutes the claim for priority as required by 35 U.S.C. 119(b) and 37 CFR 1.55. When priority is claimed to a foreign application that is eligible for retrieval under the priority document exchange program (PDX)ⁱ the information will be used by the Office to automatically attempt retrieval pursuant to 37 CFR 1.55(i)(1) and (2). Under the PDX program, applicant bears the ultimate responsibility for ensuring that a copy of the foreign application is received by the Office from the participating foreign intellectual property office, or a certified copy of the foreign priority application is filed, within the time period specified in 37 CFR 1.55(g)(1).

Application Number	Country ⁱ	Filing Date (YYYY-MM-DD)	Access Code ^j (if applicable)	Remove
Additional Foreign Priority Data may be generated within this form by selecting the Add button.				Add

Statement under 37 CFR 1.55 or 1.78 for AIA (First Inventor to File) Transition Applications

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

☐ This application (1) claims priority to or the benefit of an application filed before March 16, 2013 and (2) also contains, or contained at any time, a claim to a claimed invention that has an effective filing date on or after March 16, 2013.

NOTE: By providing this statement under 37 CFR 1.55 or 1.78, this application, with a filing date on or after March 16, 2013, will be examined under the first inventor to file provisions of the AIA.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

Authorization or Opt-Out of Authorization to Permit Access:

When this Application Data Sheet is properly signed and filed with the application, applicant has provided written authority to permit a participating foreign intellectual property (IP) office access to the instant application-as-filed (see paragraph A in subsection 1 below) and the European Patent Office (EPO) access to any search results from the instant application (see paragraph B in subsection 1 below).

Should applicant choose not to provide an authorization identified in subsection 1 below, applicant **must opt-out** of the authorization by checking the corresponding box A or B or both in subsection 2 below.

NOTE: This section of the Application Data Sheet is **ONLY** reviewed and processed with the **INITIAL** filing of an application. After the initial filing of an application, an Application Data Sheet cannot be used to provide or rescind authorization for access by a foreign IP office(s). Instead, Form PTO/SB/39 or PTO/SB/69 must be used as appropriate.

1. Authorization to Permit Access by a Foreign Intellectual Property Office(s)

A. Priority Document Exchange (PDX) - Unless box A in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the European Patent Office (EPO), the Japan Patent Office (JPO), the Korean Intellectual Property Office (KIPO), the State Intellectual Property Office of the People's Republic of China (SIPO), the World Intellectual Property Organization (WIPO), and any other foreign intellectual property office participating with the USPTO in a bilateral or multilateral priority document exchange agreement in which a foreign application claiming priority to the instant patent application is filed, access to: (1) the instant patent application-as-filed and its related bibliographic data, (2) any foreign or domestic application to which priority or benefit is claimed by the instant application and its related bibliographic data, and (3) the date of filing of this Authorization. See 37 CFR 1.14(h)(1).

B. Search Results from U.S. Application to EPO - Unless box B in subsection 2 (opt-out of authorization) is checked, the undersigned hereby **grants the USPTO authority** to provide the EPO access to the bibliographic data and search results from the instant patent application when a European patent application claiming priority to the instant patent application is filed. See 37 CFR 1.14(h)(2).

The applicant is reminded that the EPO's Rule 141(1) EPC (European Patent Convention) requires applicants to submit a copy of search results from the instant application without delay in a European patent application that claims priority to the instant application.

2. Opt-Out of Authorizations to Permit Access by a Foreign Intellectual Property Office(s)

☐ A. Applicant **DOES NOT** authorize the USPTO to permit a participating foreign IP office access to the instant application-as-filed. If this box is checked, the USPTO will not be providing a participating foreign IP office with any documents and information identified in subsection 1A above.

☐ B. Applicant **DOES NOT** authorize the USPTO to transmit to the EPO any search results from the instant patent application. If this box is checked, the USPTO will not be providing the EPO with search results from the instant application.

NOTE: Once the application has published or is otherwise publicly available, the USPTO may provide access to the application in accordance with 37 CFR 1.14.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

Applicant Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Applicant	1	Remove
If the applicant is the inventor (or the remaining joint inventor or inventors under 37 CFR 1.45), this section should not be completed. The information to be provided in this section is the name and address of the legal representative who is the applicant under 37 CFR 1.43; or the name and address of the assignee, person to whom the inventor is under an obligation to assign the invention, or person who otherwise shows sufficient proprietary interest in the matter who is the applicant under 37 CFR 1.46. If the applicant is an applicant under 37 CFR 1.46 (assignee, person to whom the inventor is obligated to assign, or person who otherwise shows sufficient proprietary interest) together with one or more joint inventors, then the joint inventor or inventors who are also the applicant should be identified in this section. Clear		
☒ Assignee	Legal Representative under 35 U.S.C. 117	Joint Inventor
Person to whom the inventor is obligated to assign.		Person who shows sufficient proprietary interest
If applicant is the legal representative, indicate the authority to file the patent application, the inventor is:		
Name of the Deceased or Legally Incapacitated Inventor:		
If the Applicant is an Organization check here. ☒		
Organization Name	MAXELL, LTD.	
Mailing Address Information For Applicant:		
Address 1	1, Koizumi, Oyamazaki, Oyamazaki-cho, Otokuni-gun	
Address 2		
City	Kyoto	State/Province
Country	JP	Postal Code
Phone Number		Fax Number
Email Address		
Additional Applicant Data may be generated within this form by selecting the Add button. Add		

Assignee Information including Non-Applicant Assignee Information:

Providing assignment information in this section does not substitute for compliance with any requirement of part 3 of Title 37 of CFR to have an assignment recorded by the Office.

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

Assignee	1			
Complete this section if assignee information, including non-applicant assignee information, is desired to be included on the patent application publication. An assignee-applicant identified in the "Applicant Information" section will appear on the patent application publication as an applicant. For an assignee-applicant, complete this section only if identification as an assignee is also desired on the patent application publication.				
				Remove
If the Assignee or Non-Applicant Assignee is an Organization check here.				☐
Prefix	Given Name	Middle Name	Family Name	Suffix
Mailing Address Information For Assignee including Non-Applicant Assignee:				
Address 1				
Address 2				
City		State/Province		
Country ⁱ		Postal Code		
Phone Number		Fax Number		
Email Address				
Additional Assignee or Non-Applicant Assignee Data may be generated within this form by selecting the Add button.				Add

Signature:

NOTE: This Application Data Sheet must be signed in accordance with 37 CFR 1.33(b). However, if this Application Data Sheet is submitted with the **INITIAL** filing of the application and either box A or B is not checked in subsection 2 of the "Authorization or Opt-Out of Authorization to Permit Access" section, then this form must also be signed in accordance with 37 CFR 1.14(c).

This Application Data Sheet **must** be signed by a patent practitioner if one or more of the applicants is a **juristic entity** (e.g., corporation or association). If the applicant is two or more joint inventors, this form must be signed by a patent practitioner, **all** joint inventors who are the applicant, or one or more joint inventor-applicants who have been given power of attorney (e.g., see USPTO Form PTO/AIA/81) on behalf of **all** joint inventor-applicants.

See 37 CFR 1.4(d) for the manner of making signatures and certifications.

Signature	/Tomoki Tanida/		Date (YYYY-MM-DD)	2019-09-19
First Name	Tomoki	Last Name	Tanida	Registration Number
				60,453
Additional Signature may be generated within this form by selecting the Add button.				Add

Application Data Sheet 37 CFR 1.76		Attorney Docket Number	075425-0083
		Application Number	
Title of Invention	PORTABLE TERMINAL APPARATUS		

This collection of information is required by 37 CFR 1.76. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 23 minutes to complete, including gathering, preparing, and submitting the completed application data sheet form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. **SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.**

Privacy Act Statement

The Privacy Act of 1974 (P.L. 93-579) requires that you be given certain information in connection with your submission of the attached form related to a patent application or patent. Accordingly, pursuant to the requirements of the Act, please be advised that: (1) the general authority for the collection of this information is 35 U.S.C. 2(b)(2); (2) furnishing of the information solicited is voluntary; and (3) the principal purpose for which the information is used by the U.S. Patent and Trademark Office is to process and/or examine your submission related to a patent application or patent. If you do not furnish the requested information, the U.S. Patent and Trademark Office may not be able to process and/or examine your submission, which may result in termination of proceedings or abandonment of the application or expiration of the patent.

The information provided by you in this form will be subject to the following routine uses:

1. The information on this form will be treated confidentially to the extent allowed under the Freedom of Information Act (5 U.S.C. 552) and the Privacy Act (5 U.S.C. 552a). Records from this system of records may be disclosed to the Department of Justice to determine whether the Freedom of Information Act requires disclosure of these records.
2. A record from this system of records may be disclosed, as a routine use, in the course of presenting evidence to a court, magistrate, or administrative tribunal, including disclosures to opposing counsel in the course of settlement negotiations.
3. A record in this system of records may be disclosed, as a routine use, to a Member of Congress submitting a request involving an individual, to whom the record pertains, when the individual has requested assistance from the Member with respect to the subject matter of the record.
4. A record in this system of records may be disclosed, as a routine use, to a contractor of the Agency having need for the information in order to perform a contract. Recipients of information shall be required to comply with the requirements of the Privacy Act of 1974, as amended, pursuant to 5 U.S.C. 552a(m).
5. A record related to an International Application filed under the Patent Cooperation Treaty in this system of records may be disclosed, as a routine use, to the International Bureau of the World Intellectual Property Organization, pursuant to the Patent Cooperation Treaty.
6. A record in this system of records may be disclosed, as a routine use, to another federal agency for purposes of National Security review (35 U.S.C. 181) and for review pursuant to the Atomic Energy Act (42 U.S.C. 218(c)).
7. A record from this system of records may be disclosed, as a routine use, to the Administrator, General Services, or his/her designee, during an inspection of records conducted by GSA as part of that agency's responsibility to recommend improvements in records management practices and programs, under authority of 44 U.S.C. 2904 and 2906. Such disclosure shall be made in accordance with the GSA regulations governing inspection of records for this purpose, and any other relevant (i.e., GSA or Commerce) directive. Such disclosure shall not be used to make determinations about individuals.
8. A record from this system of records may be disclosed, as a routine use, to the public after either publication of the application pursuant to 35 U.S.C. 122(b) or issuance of a patent pursuant to 35 U.S.C. 151. Further, a record may be disclosed, subject to the limitations of 37 CFR 1.14, as a routine use, to the public if the record was filed in an application which became abandoned or in which the proceedings were terminated and which application is referenced by either a published application, an application open to public inspections or an issued patent.
9. A record from this system of records may be disclosed, as a routine use, to a Federal, State, or local law enforcement agency, if the USPTO becomes aware of a violation or potential violation of law or regulation.