FORM PTO-1619A Expires 06/30/99 OMB 0651-0027 NOV 1 8 2002 11-25-2002 **ECORDATION** Submission Type **Assignment** New Resubmission (Non-Recordation) License **Document ID#** Correction of PTO Error Merger Frame # Reel # **Corrective Document** Frame # Reel # Conveying Party(ies) Name (line 1) Hirofumi YUDAHIRA Second Party Name (line 1) Naohisa MORIMOTO Receiving Party Name (line 1) MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. Name (line 2) Address (line 1) 1006, Oaza Kadoma, Kadoma-shi,

U.S. Department of Commerce Patent and Trademark Office **PATENT**

COVER SHEET PATENTS ONLY 102291877 FAIEINIO ONLI Commissioner of Patents and Trademarks: Please record the attached original document(s) or copy(ies) Conveyance Type Security Agreement Change of Name Other U.S. Government (For Use ONLY by U.S. Government Agencies) Departmental File Secret File Mark if additional names of conveying parties attached Execution Date 06/04/2002 Name (line 2) Yuumanshion 1A, 2030-1, Nakanogo, Araicho, Hamana-gun, Shizuoka 431-0301 Japan **Execution Date** Month Day 05/31/2002 Name (line 2) B-102, 5-5, Nishiodakano 2-chome, Toyohashi-shi, Aichi 440-0013 Japan Mark if additional names of receiving parties attached If document to be recorded is an assignment and the receiving party is not domiciled in the United States, an appointment of a domestic representative is attached. (Designation must be a separate document from Assignment.) Address (line 2) Address (line 3) Osaka Japan 571-8501 State/Country Zip Code Domestic Representative Name and Address Enter for the first Receiving Party only. Name | Michael K. Kelly Address (line 1) SNELL & WILMER, LLP Address (line 2) One Arizona Center Address (line 3) 400 E. Van Buren Street Address (line 4) Phoenix, AZ 85004-2202 00000098 192814 10159617 11/22/2002 DBYRNE FOR OFFICE USE ONLY 40.00 CH 01 FC=8021

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D.C. 20231 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (0651-0027), Washington, D.C. 20503. See OMB Mail documents to be recorded with required cover sheet(s) information to: Commissioner of Patents and Trademarks, Box Assignments, Washington, D.C. 20231

REEL: 013509 FRAME: 0460

FORM PTO-1619B Expires 06/30/99 OMB 0651-0027	Page 2	U.S. Department of Commerce Patent and Trademark Office PATENT
Correspondent Name and Address	Area Code and Telephone Number	602-382-6291
Name Michael K. Kelly		
Address (line 1) SNELL & WILMER, LLP		
Address (line 2) One Arizona Center		
Address (line 3) 400 E. Van Buren Street		
Address (line 4) Phoenix, AZ 85004-2202	**************************************	
Pages Enter the total number of pagincluding any attachments.	ges of the attached conveyance docume	nt # 5
Application Number(s) or Patent Nur	nber(s) Mark if a	dditional numbers attached
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Patent Application Number(s)	Patent	Number(s)
10/159,617		
If this document is being filed together with a new Pat was	ent Application, enter the date the patent applicati	on Month Day Year
Patent Cooperation Treaty (PCT)	PCT PCT	PCT
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only if a U.S. Application Number has not been assigned.	PCT PCT	PCT
Number of Properties Enter the total	number of properties involved.	1
Fee Amount Fee Amount	t for Properties Listed (37 CFR 3.41): \$	40.00
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(Enter for payment by deposit account or if ad	Iditional fees can be charged to the Deposit Account Number: #	19-2814
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Statement and Signature

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document. Charges to deposit account are authorized, as indicated herein.

Michael K. Kelly, Reg. No. 32,848

Name of Person Signing

Signature

November 12, 2002

Date

FORM PTO-1619C Expires 06/30/99 OMB 0651-0027

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Name (line 2)			Execution Date Month Day Year
Name (line 1)			
Name (line 2)			
Receiving P	arty Mark if additional names of	receivir	g parties attached
Name (line 1)	TOYOTA JIDOSHA KABUSHIKI KAISHA	1	If document to be recorded is an assignment and the
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Address (line 1)	1, Toyotacho, Toyota-shi		representative is attached. (Designation must be a separate document from
Address (line 2)			Assignment.)
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	City State/Country Zip Co	ode	
			nbers attached
	ne Patent Application Number or the Patent Number (DO NOT ENTER BOTH numbers for the tent Application Number(s) Patent Number (s)		
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PATENT REEL: 013509 FRAME: 0462

ASSIGNMENT

WHEREAS, The ASSIGNOR, comprising the following named inventor(s):

- Hirofumi YUDAHIRA; Yuumanshion 1A, 2030-1, Nakanogo, Araicho,
 Hamana-gun, Shizuoka 431-0301 Japan
- Naohisa MORIMOTO; B-102, 5-5, Nishiodakano 2-chome, Toyohashi-shi,
 Aichi 440-0013 Japan

have invented and own a certain invention entitled:

BATTERY VOLTAGE DETECTION DEVICE

for which application for Letters Patent of the United States was filed as U.S. Serial No. 10/159,617 on 05/29/2002; and

WHEREAS, the ASSIGNEE(S):

MATSUSHITA ELECTRIC INDUSTRIAL CO., LTD. 1006, Oaza Kadoma, Kadoma-shi, Osaka 571-8501 Japan

and

TOYOTA JIDOSHA KABUSHIKI KAISHA 1, Toyotacho, Toyota-shi, Aichi 471-8571 Japan

are desirous of acquiring the entire interest in, to and under said invention and the United States Letters Patent to be obtained therefor;

NOW, THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that in consideration of the payment by ASSIGNEE to ASSIGNORS of the sum corresponding to One Dollar (\$1.00), the receipt of which is hereby acknowledged, and for other good and valuable consideration, ASSIGNORS hereby sell, assign and transfer to ASSIGNEES the full and exclusive right, title and interest to said invention and all Letters Patent of the United States to be obtained therefor on said application or any continuation, division, renewal, substitute or reissue thereof for the full term or terms for which the same may be granted.

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PATENT REEL: 013509 FRAME: 0463 ASSIGNORS hereby covenant that no assignment sale agreement charge or other encumbrance has been or will be entered into which would conflict with this assignment and sale;

ASSIGNORS further covenant that ASSIGNEES will, upon their request, be provided promptly with all pertinent facts and documents relating to said application, said invention and said Letters Patent as may be known and accessible to ASSIGNORS and will testify as to the same in any interference or litigation related thereto and will promptly execute and deliver to ASSIGNEES or their legal representative any and all papers, instruments or affidavits required to apply for, obtain, maintain and enforce said application, said invention and said Letters Patent which may be necessary or desirable to carry out the purposes hereof.

IN WITNESS WHEREOF, the parties have hereunto set their hands and seal

cals cay or	
	4
June 4, 2002	

1. Hirofumi Yudahira
(Hirofumi YUDAHIRA)

May 31, 2002

2. Nachisa Morimoto
(Nachisa MORIMOTO)

Kellym\PHX\1001715.1

RECORDED: 11/18/2002

PATENT REEL: 013509 FRAME: 0464