PATENT ASSIGNMENT

Electronic Version v1.1 Stylesheet Version v1.1

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
Kazuhiro Nakashima	10/24/2011
Arinobu Kimura	10/24/2011
Hiroki Okada	10/24/2011
Hiroko Murakami	10/25/2011

RECEIVING PARTY DATA

Name:	DENSO CORPORATION
Street Address:	1-1, Showa-cho
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State/Country:	JAPAN
Postal Code:	448-8661

Name:	Toyota Jidosha Kabushiki Kaisha	
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City:	Toyota-city, Aichi-pref.	
State/Country:	JAPAN	
Postal Code:	471-8571	

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	13280911

CORRESPONDENCE DATA

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PATENT

REEL: 027298 FRAME: 0031

501739381

Address Line 1: P.O. BOX 828 Address Line 4: BLOOMFIELD HILLS, MICHIGAN 48303 ATTORNEY DOCKET NUMBER: 4041J-001863/US NAME OF SUBMITTER: Michael J. Schmidt

Total Attachments: 2

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> **PATENT REEL: 027298 FRAME: 0032**

ASSIGNMENT BY INVENTORS

Sole or Joint

WHEREAS, the undersigned, hereinafter referred to as Assignor(s), have invented

	IN-VEHICLE DE	VICE CONTROLLER	
for which the ur	ndersigned executed an applicati	on for Letters Patent of	the United States of America:
(A)	× even date herewith		
(B)	on		
(C)	$_{ m x}$ in U.S. Appln. No. $^{13/}$	²⁸⁰ ,911 filed 10	725/2011
AND WH	EREAS,		
DENSO	CORPORATION,1-1, Showa-cl	ho, Kariya-city, Aichi-p	oref., 448-8661 Japan
TOYOTA JIDOS	SHA KABUSHIKI KAISHA,1, To	yota-cho, Toyota-city,	Aichi-pref., 471-8571 Japan
hereinafter referre	ed to as Assignee, is desirous of	acquiring an interest the	erein:
acknowledged, As interest, the full ar right to claim prior as described in the States application. Letters Patent the Letters Patent are held by Assignors agree to execute. United States applied of protecting title to the benefit of Assignors agree.	HEREFORE, for good and vassignors by these presents do send exclusive right in the United Sorty under the laws of the United he specification executed by Astronomous for patent therefor, said inventional erefor to be held and enjoyed by granted and any extensions the shad this assignment and sale all instruments or documents relication for patent and all foreign to the said invention, the United Assignee without further or other the Commissioner of Patents and to Assignee(s).	ell, assign and transfer untates of America and all States and the Paris Consignors of even date on and all United States by Assignee to the full reof as fully and entirely not been made; and Aquired or requested for countries on, for litigation States application for paccompensation than that	into Assignee, its successors in foreign countries, including the convention, to the said invention preparatory to filing a United applications for patent and all end of the term for which said as the same would have been assignors hereby covenant and the making and prosecution of on regarding, or for the purpose atent, or Letters Patent therefor above set forth; and Assignors
Kayuhvo , Inventor 1: Kaz	Nelashima zuhiro Nakashima	October 24.2011 Date	Jasuyuki Hayashi Witness
Inventor 2: Ari	nobu Kimura	Date	Witness
Inventor 3: Hire	oki Okada	Date	Witness

Date

Inventor 4:

Hiroko Murakami

PATENT REEL: 027298 FRAME: 0033

Witness

Attorney Docket No. 4041J₂01863/US 133759-US-HE-mik TSN 2014-1667-US-00

ASSIGNMENT BY INVENTORS

Sole or Joint

WHEREAS, the undersigned, hereinafter referred to as Assignor(s), have invented

IN-VEHICLE DEVICE CONTROLLER			
for which the undersigned executed an applica	tion for Letters Patent of th	ne United States of America:	
(A) × even date herewith			
(B) on	10 100 a 00 a 10 a 10 a 10 a 10 a 10 a		
(C) X in U.S. Appln. No1	13/280,911 filed 10/25	5/2011	
AND WILLDEAG			
AND WHEREAS,			
DENSO CORPORATION,1-1, Showa-o	cho, Kariya-city, Aichi-pr	ef., 448-8661 Japan	
TOYOTA JIDOSHA KABUSHIKI KAISHA,1, T	oyota-cho, Toyota-city, A	ichi-pref., 471-8571 Japan	
hereinafter referred to as Assignee, is desirous of	f acquiring an interest there	ein:	
NOW, THEREFORE, for good and va	aluable consideration the	a raceint whoreof is hereby	
acknowledged, Assignors by these presents do s	sell, assign and transfer un	to Assignee its successors in	
interest, the full and exclusive right in the United S	States of America and all f	oreign countries, including the	
right to claim priority under the laws of the United	d States and the Paris Co	nvention, to the said invention	
as described in the specification executed by A	Assignors of even date p	reparatory to filing a United	
States application for patent therefor, said invent	tion and all United States	applications for patent and all	
Letters Patent therefor to be held and enjoyed Letters Patent are granted and any extensions the	by Assignee to the full el	of the term for which said	
held by Assignors had this assignment and sale	ereor as rully and entirely a	signors hereby covenant and	
agree to execute all instruments or documents re	equired or requested for the	ne making and prosecution of	
United States application for patent and all foreign	n countries on, for litigatior	regarding, or for the purpose	
of protecting title to the said invention, the United	States application for pat	ent, or Letters Patent therefor	
for the benefit of Assignee without further or other	r compensation than that a	above set forth; and Assignors	
hereby request the Commissioner of Patents and Trademarks to issue said Letters Patent of the United			
States of America to Assignee(s).			
•			
Inventor 1: Kazuhiro Nakashima	Date	Witness	
arinobu Limura	A+1. 01 2.11	7 0/:0-	
Inventor 2: Arinobu Kimura	October 24, 2011	Jun Hoki	
	Λ	77141000	
HIVORI ORAda	October 24, 2011	Jun Hioki	
Inventor 3: Hiroki Okada	Date	Witness	
Idviolero Muraleani	October 25, 2011 Date	From Hicki	
Inventor 4: Hiroko Murakami	Date Date	Witness	

PATENT REEL: 027298 FRAME: 0034

RECORDED: 11/30/2011