Ass Dir P.0	nil Stop: signment Recordation Services RE rector of the U.S. Patent and Trademark Office D. Box 1450 exandria, VA 22313-1450	ECORDATION FORM C PATENTS ON	LY		MENT OF COMMERCE ent and Trademark Office		
	ase record the attached document. al number of pages including cover sheet, at	tachments, and document:	2				
1.	A. Name of conveying party: Naoki MIURA B. Additional name(s) of conveying party:		AISIN A 10, TAK	address of receiving W CO., LTD. ANE, FUJII-CI			
3.	_	rger ange of Name	B. Additional	name(s) & addres	s(es) attached? es ⊠ No		
4.	A. Patent Application No. 12/938	en e i he conseq	B. Patent No.((s)			
	Additional numbers attached? ☐ Yes ☒ No C. Title of Application: GUIDANCE CONTROL DEVICE, GUIDANCE CONTROL METHOD, AND GUIDANCE CONTROL PROGRAM						
5.	Name and address of party to whom correspondering document should be mailed:	pondence 6	. Total number of	applications and p	patents involved: 1		
	Name: <u>James A. Olíff</u>	7.			ount No. 15-0461 the e amount of \$40.00.		
	Address: OLIFF & BERRIDGE, PLO P.O. Box 320850 Alexandria, VA 22320-485 Phone Number: 703-836-640 Fax Number: 703-836-278	0		ayment or charge a number 15-0461.	any underpayment to		
9.	Statement and signature. To the best of my knowledge and belief, the original document. James A. Oliff, Registration No. 27,075 Scott M. Schulte, Registration No. 44,325	foregoing information is		d any attached co	py is a true copy of the		

PATENT REEL: 025300 FRAME: 0121

RECORDED: 11/03/2010

ASSIGNMENT

(1-8)			Naoki MIURA	
	Insert Name(s)	(2)		_ (5)
	of Inventor(s)	(3)		(7)
		(4)		(8)
		to eac	In consideration of the sum of one dollar of	\$1.00) and other good and valuable consideration paid rees to assign, and hereby does assign, transfer and set
(9)	Insert Name of Assignce	(0)	LTOP LANCE OF	
(10)	Insert Address of Assignee	(9) (10)	AISIN AW CO., LTD. 10, Takane, Fujii-cho,	
	Masignet		Anjo-shi, Aichi-ken, 444-1192 Japan	
		invent: contin	on, and in all applications for patent includi- lation, international, confirmation, substitute	mee's heirs, successors, assigns and legal representatives tes of America as defined in 35 U.S.C. §100, in the ing any and all provisional, nonprovisional, divisional, e and reissue application(s), and all Letter Patent, that may be granted on the invention known as
(11)	Insert	(11)	GUIDANCE CONTROL DEVICE, GUI CONTROL PROGRAM	IDANCE CONTROL METHOD, AND GUIDANCE
	ldentification such as Title, Case			
	Number, or Foreign			
	Application Number		ey Docket No. 146695	
		for whi	ch the undersigned has (have) executed an date herewith or	application for patent in the United States of America
(12)	Insert Date of Signing of	(12)	November 2, 201	Λ.
	Application	(12)		U .
(13)	Alternative	(13)	U.S. application Serial Number	12/938,693
	identification for filed applications			
	men applications	filed	November 3, 2010	
any app	ions and patents as the Assig 2) Each undersigned agree lication or continuation or di gnee in every way possible is	s to execut n, and any j gnee may d s to execut ivision ther	e all papers necessary in connection with an nation (s) issuing thereon, and also to execute the necessary in connection with an expert necessary in connection with an experiment of reissue application based on the national nation and action and action to the national nati	ary application and any continuing, divisional or the separate assignments in connection with such any interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference.
any appithe Assitution of the	ions and patents as the Assig 2) Each undersigned agree (lication or continuation or di- gnee in every way possible i 3) Each undersigned agreent reprovisions of the Internation 4) Each undersigned agreent action, a grant of a valid Unit 5) Each undersigned author of the United States resulting to convey the entire interest es that this assignment is bir 6) Each undersigned hereby ation that may be necessary to on of this document.	is to execution, and any ingoes may do so executivision therest to execute the second converse to perform the states and register and register and register and register and register as a ding on his y grants the cor desirable.	e all papers necessary in connection with an patent(s) issuing thereon, and also to execute necessary. all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any attent or Protection of Industrial Property of all affirmative acts which may be necessare attent to the Assignee. quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with and his heirs, successors, assigns and legitim of Oliff & Berringer, PlC the power in order to comply with the rules of the Universal of the Univ	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference. y act which may be necessary in connection with or similar agreements. ary to obtain, maintain or confirm by reissue or of and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. er to insert on this assignment any further nited States Patent and Trademark Office for
any app. the Assi claims o reexemin Patents o full right and agre identificate recordati	ions and patents as the Assignost and patents as the Assignost and	is to execution, and any jugoes may do see to execute the control of the control	e all papers necessary in connection with an executive issuing thereon, and also to execute mecessary. It all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any ation for Protection of Industrial Property of all affirmative acts which may be necessared to the Assignee. Quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with and his heirs, successors, assigns and legitum of OLIFF & BERRIDGE, PLC the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned.	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference. y act which may be necessary in connection with or similar agreements. ary to obtain, maintain or confirm by reissue or of and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. er to insert on this assignment any further nited States Patent and Trademark Office for
eny app the Assi claims o reexamin Patents o full right and agre dentifica ecordati	ions and patents as the Assig 2) Each undersigned agree (lication or continuation or di- gnee in every way possible i 3) Each undersigned agreent reprovisions of the Internation 4) Each undersigned agreent action, a grant of a valid Unit 5) Each undersigned author of the United States resulting to convey the entire interest es that this assignment is bir 6) Each undersigned hereby ation that may be necessary to on of this document.	is to execution, and any jugoes may do see to execute the control of the control	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. It all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any attention for Protection of Industrial Property of all affirmative acts which may be necessare to the Assignee, quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and win and his heirs, successors, assigns and leg firm of Oliff & Berringer, Ple the power in order to comply with the rules of the United States	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. Any to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has ill not execute, any agreements in conflict herewith, gal representatives. Let to insert on this assignment any further nited States Patent and Trademark Office for undersigned name(s).
any app the Assi claims o reexemin Patents of full right und agre dentifica ecordati	ions and patents as the Assignost and patents as the Assignost and patents are to a pack and a pack as a p	is to execution, and any ignee may do so executivision there is to execute the solution of the	e all papers necessary in connection with an executive issuing thereon, and also to execute mecessary. all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any attent or protection of Industrial Property of a all affirmative acts which may be necessare attent to the Assignee. quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and legitim of Oliff & Berringe, PlC the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the understand the processor of the U.	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with possibility and the sequence of the animal agreements. Any to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has ill not execute, any agreements in conflict herewith, gal representatives. But to insert on this assignment any further nited States Patent and Trademark Office for undersigned name(s). Mitte. (SEAL)
any appithe Assiclaims of reexeminary attents. Call right agreed antificult accordation and the accordation attents.	ions and patents as the Assignost and patents as the Assignost and patents are appeared agree in every way possible if an appear and a provisions of the Internation agrant of a valid Unit 5). Each undersigned agrees agrant of a valid Unit 5). Each undersigned author of the United States resulting to convey the entire interest that this assignment is but of Each undersigned hereby ation that may be necessary to on of this document. In witness whereof, execut	is to execution, and any ignee may do see to executivision ther mobile in the control of the con	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. I all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any attent for Protection of Industrial Property of all affirmative acts which may be necessatent to the Assignee. quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and win and his heirs, successors, assigns and legitim of Olife & Berringe, Flot the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the university of the property of the property of the property of the property of the University of t	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. ary to obtain, maintain or confirm by reissue or of and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. er to insert on this assignment any further nited States Patent and Trademark Office for andersigned name(s). Migro. (SEAL)
any appithe Assi claims o cexemin Patents o full right and agre dentificate cordati	ions and patents as the Assignous and patents as the Assignous and patents are as the Assignous and a continuation or dispase in every way possible it. 3) Each undersigned agrees a provisions of the Internation of the Internation a grant of a valid Unit 5) Each undersigned author of the United States resulting to convey the entire interestes that this assignment is bir 6) Each undersigned hereby ation that may be necessary on of this document. In witness whereof, execut	is to executing, and any ignee may do so executivision there is to execute the solution of the	all papers necessary in connection with an intentify issuing thereon, and also to execute necessary. all papers necessary in connection with an economic necessary. all papers necessary in connection with an economic necessary in connection with such intentify in the intention for protection of Industrial Property of all affirmative acts which may be necessary at the Assignee. quests the Commissioner of the U.S. Patentify application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and legation of OLIFF & BERRIDGE, PLC the power in order to comply with the rules of the Undersigned on the date(s) opposite the un	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with por similar agreements. Any to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. Let to insert on this assignment any further nited States Patent and Trademark Office for the entire interest. Mivro. (SEAL) (SEAL)
any appithe Assiclaims of recenting the second and agreed and agreed at the second at	ions and patents as the Assignost and patents are the Assignost and the Assignost are the Assignost and the Assignost are the Assignost and the Assignost and the Assignost and the Assignost and the Assignost are the Assignost and the Assignost an	is to execution, and any ignee may do see to executivision ther nobtaining is to execute anal Converse to perform the States performed States perform said to herein assending on high grants the cor desirable and the the total corrections and the seed by the terminal corrections and the seed by the terminal corrections are desirable and the seed by the terminal corrections are seed by the terminal corrections are seed to the terminal corrections.	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. I all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any tion for Protection of Industrial Property of all affirmative acts which may be necessared at the the Assignee. Quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and legitim of Oliff & Berringe, Plc the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on the date(s) in the liventor Signature Inventor Signature Inventor Signature Inventor Signature	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. Any to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has ill not execute, any agreements in conflict herewith, gal representatives. Let to insert on this assignment any further nited States Patent and Trademark Office for undersigned name(s). Migro. (SEAL) (SEAL)
any appithe Assi claims o recxemin Patents (cult right and agre dentificate cordati pate	ions and patents as the Assignost and patents as the Assignost and patents are as the Assignost and a continuation or dispate in every way possible it. 3) Each undersigned agreement agreement and agreement and a continuation a grant of a valid Unit 5) Each undersigned author of the United States resulting to convey the entire interest that this assignment is bit 6) Each undersigned hereby ation that may be necessary of on of this document. In witness whereof, execut	is to execution, and any ignee may do see to executivision there in obtaining the see to execute the seed on all Converses to perform the States performs and it herein assumed to the seed of the see	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any ation for Protection of Industrial Property of all affirmative acts which may be necessation to the Assignce. quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and win and his heirs, successors, assigns and legitim of Oliff & Berringe, Flut the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on Signature Inventor Signature Inventor Signature Inventor Signature Inventor Signature	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. ary to obtain, maintain or confirm by reissue or of and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. er to insert on this assignment any further nited States Patent and Trademark Office for indersigned name(s). Mivro. (SEAL) (SEAL) (SEAL)
any appirite Assi	ions and patents as the Assignost and patents are the Assignost and patents are the Assignost and the	is to execute in, and any goes may do so execute ivision ther or obtaining so to execute in all Convers to perform and Convers and register and register as and ing on his yearns the or desirable and by the converse of the	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any attent or protection of Industrial Property of all affirmative acts which may be necessared as the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and legitum of Oliff & Berringe, PlC the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on the date(s) disposite the undersigned on the date(s) in the rules of the Undersigned on the date(s) in the undersigned on	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. Any to obtain, maintain or confirm by reissue or of and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has ill not execute, any agreements in conflict herewith, gal representatives. For to insert on this assignment any further nited States Patent and Trademark Office for states in the set of the conflict herewith, in the set of the confirmation of the conflict herewith, gal representatives. Mivro. (SEAL) (SEAL) (SEAL) (SEAL)
any appithe Assi claims o reexamin Patents c full right and agre dentificate ecordati Date ate ate ate ate ate ate	ions and patents as the Assignost and patents as the Assignost and patents are as the Assignost and a continuation or dispate in every way possible it. 3) Each undersigned agreement agreement and agreement and a continuation a grant of a valid Unit 5) Each undersigned author of the United States resulting to convey the entire interest that this assignment is bit 6) Each undersigned hereby ation that may be necessary of on of this document. In witness whereof, execut	is to execute in, and any goes may do so execute ivision ther or obtaining so to execute in all Convers to perform and Convers and register and register as and ing on his yearns the or desirable and by the converse of the	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute macessary. I all papers necessary in connection with an eco, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any ition for Protection of Industrial Property of all affirmative acts which may be necessare to the Assignee, quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and leg firm of Oliff & Berringe, Ple the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on Signature Inventor Signature	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. any to obtain, maintain or confirm by reissue or and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. Let to insert on this assignment any further nited States Patent and Trademark Office for undersigned name(s). Migro. (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
any appithe Assi claims o recxemin Patents (cult right and agre dentificate cordati Date ate ate ate ate ate ate ate	ions and patents as the Assignous and patents as the Assignous and patents are as the Assignous and the Assignous or continuation or dignee in every way possible if a provisions of the Internation a grant of a valid Unit 5). Each undersigned agreemation a grant of a valid Unit 5). Each undersigned author of the United States resulting to convey the entire interest that this assignment is bir 6). Each undersigned hereby ation that may be necessary to on of this document. In witness whereof, execut	is to executing, and any goes may do so to executivision ther mobile in the control of the contr	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute mecessary. I all papers necessary in connection with an economic or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any intion for Protection of Industrial Property of all affirmative acts which may be necessared to the Assignee. Quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and win and his heirs, successors, assigns and legistrated for the Commissioner of the United States o	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. any to obtain, maintain or confirm by reissue or an and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. The to insert on this assignment any further nited States Patent and Trademark Office for madersigned name(s). Migro (SEAL) (SEAL) (SEAL) (SEAL) (SEAL)
any appithe Assi claims o reexamin Patents t full right and agre dentificate coordati Date Date Date T ate T either, th	ions and patents as the Assign 2) Each undersigned agree in every way possible if an every way possible if a provisions of the Internation agrant of a valid Unit of the United States resulting to convey the entire interest es that this assignment is bit of Each undersigned hereby ation that may be necessary on of this document. In witness whereof, executively MARA ASSIGNATION ASSIG	is to execute in, and any gnee may d s to execute ivision ther in obtaining s to execute inal Conve; s to perform the States p rizes and re if from said therein ass inding on hi y grants the for desirable cd by the t () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () ()	e all papers necessary in connection with an executive issuing thereon, and also to execute mecessary. all papers necessary in connection with an eof, or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any tion for Protection of Industrial Property of all affirmative acts which may be necessared as the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and with an and his heirs, successors, assigns and legitum of Oliff & Berringe, PlC the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on Signature Inventor Signature	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. Any to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has ill not execute, any agreements in conflict herewith, gal representatives. Let to insert on this assignment any further nited States Patent and Trademark Office for states in the set of the confirmance of the confirmanc
any appithe Assi claims o reexamin Patents of full right and agre identificate coordati Date Date Date Date Date Take	ions and patents as the Assignost and patents are the Assignost and patents are the Assignost and the Assignost are provisions of the Internation a grant of a valid Unit 5). Each undersigned author of the United States resulting to convey the entire interest es that this assignment is bit of Each undersigned hereby ation that may be necessary to on of this document. In witness whereof, execut VIVENARE ASSIGNMENT	is to execute in, and any gnee may d s to execute ivision ther in obtaining s to execute inal Conve; s to perform the States p rizes and re if from said therein ass inding on hi y grants the for desirable cd by the t () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () () ()	e all papers necessary in connection with an extent(s) issuing thereon, and also to execute macessary. It all papers necessary in connection with an ecolor or any patent or reissue application base evidence and going forward with such into all papers and documents and perform any ition for Protection of Industrial Property of all affirmative acts which may be necessare to the Assignee. Quests the Commissioner of the U.S. Paten application(s) to the said Assignee, as Assigned, and that he has not executed, and win and his heirs, successors, assigns and leg firm of Oliff & Berringe, Ple the power in order to comply with the rules of the Undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on the date(s) opposite the undersigned on the date(s) apposite the undersigned on the date(s) opposite the u	ny interference which may be declared concerning sed thereon, for the invention, and to cooperate with efference, y act which may be necessary in connection with or similar agreements. ary to obtain, maintain or confirm by reissue or at and Trademark Office to issue any and all Letters ignee of the entire interest, and covenants that he has fill not execute, any agreements in conflict herewith, gal representatives. er to insert on this assignment any further nited States Patent and Trademark Office for indersigned name(s). Mivro. (SEAL) (SEAL) (SEAL) (SEAL)

PATENT

REEL: 025300 FRAME: 0122