BOX ASSIGNMENTS	02-10-199	99	DO NOT USE	FOR TRADEMARKS			
		HEET S ONL					
TO THE ASSISTANT COMMISSIR: PLEASE RECORD THE	ATT, 10096257	O / THER					
1. NAME OF CONVEYING PARTY(IES) (ASSIGNORS(S)): 1. SUGIYAMA, Tomio 2. SHIBATA, Masahiro (Deceased) 4. 5. 6. 7. ADDITIONAL NAME(S) OF CONVEYING PARTY(IES) ATTACHED? □YES ☒NO 2. PARTY(IES) (ASSIGNEE(S)) RECEIVING INTEREST:							
NAME: DENSO CORPORATION		<u>-</u>					
	Kariya-city, Aichi-pref. 448-0029 Ja		7.276.0				
ADDITIONAL NAME(S) & ADDRESS(ES) ATTACHED? YES NO 92379 [3. NATURE OF CONVEYANCE (DOCUMENT): (Submit herewith only one document for recordation—multiple copies of same Assignment signed by different inventors is one document)							
⊠ASSIGNMENT OF		REST	. DATE: Dec. 23, 26 &	24, 1998			
☐CHANGE OF NAME ☐SECURITY	☐VERIFIED TRANSLATION ☐MERGER ☐OTHER:	<u> </u>					
EXECUTION DATE(S) ON TH	EXECUTION DATE(S) ON THE DECLARATION IF FILED HEREWITH: (NOTE: IF DATES ON DECLARATION AND ASSIGNMENT DIFFER SEE ATTY!) Dec. 23, 26 & 24, 1998						
1 4.5 APPL. NO.(5) OR PAT NO	J.(3). UTHERS ON ADDITIONAL	SHEET(S) attached?	IYES IXINO				
A. PAT. APP. NO.(S) M# series code/serial no	1st INVENTOR if not in item 1	B. PATENT NO(S)	YES ⊠NO M#	1st INVENTOR if not in item 1			
A. PAT. APP. NO.(S) M# series code/serial	1st INVENTOR if not in item 1						
A. PAT. APP. NO.(S) M# series code/serial no	1st INVENTOR if not in item 1 97 o Whom Correspondence		M# _VED:				
A. PAT. APP. NO.(S) M# series code/serial no NEW APPLICATION 2601 5. Name & Address of Party t	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R	6. NUMBER INVO APPLNS 1 + PA	M# LVED: TS = TOTAL E ENCLOSED: (Code 6	if not in item 1			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 2601 5. Name & Address of Party t Concerning Document Sho Pillsbury Madison & Sutro L Intellectual Property Group 1100 NEW YORK AVENUE, N NINTH FLOOR, EAST TOWE WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918	6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL X 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO	M# LVED: TS = TOTAL E ENCLOSED: (Code ! \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 60388	1 1 581) ATE CHARGE NUMBER: 03-3975 260197			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 26019 5. Name & Address of Party to Concerning Document Shows Pillsbury Madison & Sutro Louis Intellectual Property Group 1100 NEW YORK AVENUE, NOINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-35.5 ATTY DKT:	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918	6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T	M# LVED: TS = TOTAL E ENCLOSED: (Code : \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT	if not in item 1 1 581) ATE CHARGE NUMBER: 03-3975			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 2601 5. Name & Address of Party t Concerning Document Sho Pillsbury Madison & Sutro L Intellectual Property Group 1100 NEW YORK AVENUE, N NINTH FLOOR, EAST TOWE! WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197 MATTER NO. 03/1999 DFLOYD 00000023 0923	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918 U3-9848-TS CLIENT REF.	6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL X 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO	M# LVED: TS = TOTAL E ENCLOSED: (Code ! \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 60388	1 1 581) ATE CHARGE NUMBER: 03-3975 260197			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 26019 5. Name & Address of Party t Concerning Document Sho Pillsbury Madison & Sutro L Intellectual Property Group 1100 NEW YORK AVENUE, N NINTH FLOOR, EAST TOWE WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197 MATTER NO. 03/1999 DFL0YD 00000023 0923	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918 U3-9848-TS CLIENT REF.	B. PATENT NO(S) 6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO dup. sheet not required	M# LVED: TS = TOTAL E ENCLOSED: (Code ! \$40 = \$40 MISSING OR INADEQU O DEPOSIT ACCOUNT 60388 CLIENT NO.	if not in item 1 1 581) ATE CHARGE NUMBER: 03-3975 260197 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 26019 5. Name & Address of Party t Concerning Document Sho Pillsbury Madison & Sutro L Intellectual Property Group 1100 NEW YORK AVENUE, N NINTH FLOOR, EAST TOWE WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197 MATTER NO. 03/1999 DFLOYD 0000023 0923 79. STATEMENT AND SIGNA To the best of my knowledge the original document.	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918 U3-9848-TS CLIENT REF. 7918 TURE. ge and belief, the foregoing inform. ### ### ### ########################	B. PATENT NO(S) 6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO dup. sheet not required	W# LVED: TS = TOTAL ENCLOSED: (Code state of the s	if not in item 1 1 581) ATE CHARGE NUMBER: 03-3975 260197 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 26019 5. Name & Address of Party to Concerning Document Shot Pillsbury Madison & Sutro Long Intellectual Property Group 1100 NEW YORK AVENUE, NOINTH FLOOR, EAST TOWER WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197 MATTER NO. 03/1999 DFLOYD 00000023 0923 Fg. STATEMENT AND SIGNATO the best of my knowledge the original document. Signation	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918 U3-9848-TS CLIENT REF. 7918 TURE. ge and belief, the foregoing inform. ### ### ### ########################	B. PATENT NO(S) 6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO dup. sheet not required 10. Total number of prover sheet, attachm	W# LVED: TS = TOTAL ENCLOSED: (Code state of the s	if not in item 1 1 581) ATE CHARGE NUMBER: 03-3975 260197 MATTER NO.			
A. PAT. APP. NO.(S) series code/serial no NEW APPLICATION 26019 5. Name & Address of Party t Concerning Document Sho Pillsbury Madison & Sutro L Intellectual Property Group 1100 NEW YORK AVENUE, N NINTH FLOOR, EAST TOWE WASHINGTON, D.C. 20005-3 5.5ATTY DKT: PMS 260197 MATTER NO. 03/1999 DFLOYD 0000023 0923 79: STATEMENT AND SIGNA To the best of my knowledge the original document.	1st INVENTOR if not in item 1 97 o Whom Correspondence ould be Mailed: LP I.W. R 918 U3-9848-TS CLIENT REF. 7918 TURE. ge and belief, the foregoing inform. ### ### ### ########################	B. PATENT NO(S) 6. NUMBER INVO APPLNS 1 + PA 7. AMOUNT OF FEI ABOVE TOTAL x 8. IF ABOVE FEE IS INSUFFICIENCY T UNDER ORDER NO dup. sheet not required 10. Total number of prover sheet, attachm	M# LVED: TS = TOTAL ENCLOSED: (Code state of the s	if not in item 1 1 581) ATE CHARGE NUMBER: 03-3975 260197 MATTER NO.			

FILE WITH PTO RETURN RECEIPT (PAT-103A)

Please return signed/recorded to:

Pillsbury Madison & Sutro LLP Intellectual Property Group Ninth Floor, East Tower 1100 New York Avenue, N.W. Washington, D.C. 20005-3918

USA Patent Appln. Sole or Joint

For Inventions made outside USA
executed with or after application

V. Dkt. 260197 http://www.nc.nim.com/pubmed/

Atty. Dkt. 260197

U3-9848-TS Client Ref.

NONPROVISIONAL

NONPROVISIONAL

ASSIGNMENT OF NONPROVISIONAL APPLICATION

	(1) Tomio SUGIYAMA	(4)			
INSERT NAME(S) OF	(2) Masahiro SHIBATA	(5)			
INVENTOR(S)	(3) Hiromi SANO	[]xbo	x if continued on page 2		
he receipt and assign(s) and	d sufficiency of which are hereby ackn transfer(s) unto:	owledged by the undersign	ed who at the request of, hereby sell(s),		
INSERT	DENSO CORPORATION				
NAME(S) OF ASSIGNEE(S) & ADDRESS(ES)	of 1-1, Showa-cho, Kariya-city, Aichi-pref. 448-0029 Japan				
J.S.C. 100. in	esignated "ASSIGNEE") the entire righ the invention and all applications inclu Il resulting patents, known as	nt, title and interest for the U uding any and all divisions, o	nited States of America as defined in 35 continuations, substitutes, and reissues		
FITLE OF NVENTION	MULTILAYERED AIR-F	JEL RATIO SENSING E	LEMENT		
	for which the undersigned execute	d an application for Letters	Patent of the United States of America:		
<u>NOTE</u> → → Complete	(A) X even date herewith				
ine A, B and/or C)	(B) X on December 23,	24 and 26, 1998			
ine A, B and/or C)	(B) X on <u>December 23,</u> (C) in U.S. Appln. No.	24 and 26, 1998 / filed			
and Trademar assigns and le nereinafter act	(C) in U.S. Appln. No. AND the undersigned hereby authors to issue said Letters Patent to the segals representatives; the undersigned to penalt of said ASSIGNEE.	orize(s) and request(s) the laid ASSIGNEE, for its interdagree(s) that the attorney	• •		
and Trademar assigns and le nereinafter act successors, as n and to the in	AND the undersigned hereby authors to issue said Letters Patent to the segals representatives; the undersigned hereby agressigns and legal representatives, deer over the undersigned hereby agressigns and legal representatives, deer over the undersigned hereby transferred.	orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney e(s) to testify and execute a med essential by ASSIGNE	of record in said application shall iny papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title		
and Trademar assigns and le nereinafter act successors, as n and to the u	AND the undersigned hereby authors to issue said Letters Patent to the signals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agressigns and legal representatives, deep	orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney e(s) to testify and execute a med essential by ASSIGNE	of record in said application shall iny papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title actual Property Group, of the above		
and Trademar assigns and le nereinafter act successors, as n and to the u	AND the undersigned hereby authorized to hereby against the undersigned hereby authorized to hereby against the undersigned hereby agreed to hereby agreed to hereby transferred. AND the undersigned hereby agreed hereby transferred. Indersigned hereby authorize(s) Pillshein agreed hereby authorize(s) Pillshein agreement agreed hereby authorize(s) Pillshein agreement agreeme	orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney e(s) to testify and execute a med essential by ASSIGNE	of record in said application shall iny papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title actual Property Group, of the above		
and Trademar assigns and le nereinafter act successors, as n and to the u	AND the undersigned hereby authorises to issue said Letters Patent to the signals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agressigns and legal representatives, deer invention hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	orize(s) and request(s) the said ASSIGNEE, for its interdagree(s) that the attorney (e(s) to testify and execute a med essential by ASSIGNE aury Madison & Sutro, Intellectessary or desirable for reco	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES		
and Trademar assigns and le hereinafter act successors, as n and to the in NOTE The u address to inse	AND the undersigned hereby authorises to issue said Letters Patent to the signals representatives; the undersigned ton behalf of said ASSIGNEE; AND the undersigned hereby agreesings and legal representatives, deer invention hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney e(s) to testify and execute amed essential by ASSIGNE arry Madison & Sutro, Intellectessary or desirable for recommend.	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document.		
and Trademar assigns and le hereinafter act successors, as n and to the in NOTE - The u address to inse	AND the undersigned hereby authorises to issue said Letters Patent to the signals representatives; the undersigned ton behalf of said ASSIGNEE; AND the undersigned hereby agreesings and legal representatives, deer invention hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	orize(s) and request(s) the said ASSIGNEE, for its interdagree(s) that the attorney (e(s) to testify and execute a med essential by ASSIGNE aury Madison & Sutro, Intellectessary or desirable for reco	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES		
and Trademarassigns and le hereinafter act successors, as n and to the in NOTE The u address to inse 1) S Name: Tomio 2) Masan	AND the undersigned hereby authorists to issue said Letters Patent to the signals representatives; the undersigned to no behalf of said ASSIGNEE; AND the undersigned hereby agreesings and legal representatives, deer estimated in hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney (e(s) to testify and execute amed essential by ASSIGNE aury Madison & Sutro, Intellectessary or desirable for reconstruction of the Dec. 13, 1998	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES Idurashi Suguro		
and Trademar assigns and le nereinafter act successors, as n and to the in NOTE The u address to inse 1) S Name: Tomio 2) Masah	AND the undersigned hereby authorists to issue said Letters Patent to the signals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agressigns and legal representatives, deer invention hereby transferred, indersigned hereby authorize(s) Pillsbert hereon any further identification ne	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney (e(s) to testify and execute amed essential by ASSIGNE aury Madison & Sutro, Intellectessary or desirable for reconstruction of the Dec. 13, 1998	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES Idurashi Suguro		
and Trademar assigns and le hereinafter act successors, as n and to the in NOTE - The u address to inse 1) S Name: Tomio 2) Name: Masah	AND the undersigned hereby authorises to issue said Letters Patent to the segals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agressigns and legal representatives, deer invention hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney of e(s) to testify and execute a med essential by ASSIGNE or Madison & Sutro, Intellectessary or desirable for red DATE SIGNED Dec. 23, 1998	inv papers for ASSIGNEE, its its to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES Idiroshi Sugino Yuko Idirabayashi		
and Trademar assigns and le hereinafter act successors, as n and to the in NOTE - The u address to inse 1) Some: Tomio 2) Name: Masah Name: By:Mic	AND the undersigned hereby authorises to issue said Letters Patent to the segals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agreesings and legal representatives, deer expension hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification new suggramma INVENTOR(S) Suggiyama Suggiyama Airo Shibata (Deceased) Airo Shibata (Spouse), Legal Representative	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney (e(s) to testify and execute a med essential by ASSIGNE oury Madison & Sutro, Intellectessary or desirable for reconstruction of the same of th	inv papers for ASSIGNEE, its its to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES Idiroshi Sugino Yuko Idirabayashi		
and Trademar assigns and le hereinafter act successors, as n and to the in NOTE - The u address to inse 1) S Name: Tomio 2) Masah Name: By:Mic	AND the undersigned hereby authorises to issue said Letters Patent to the segals representatives; the undersigned to behalf of said ASSIGNEE; AND the undersigned hereby agressigns and legal representatives, deer invention hereby transferred. Indersigned hereby authorize(s) Pillsbert hereon any further identification ne	filed orize(s) and request(s) the said ASSIGNEE, for its interd agree(s) that the attorney e(s) to testify and execute a med essential by ASSIGNE oury Madison & Sutro, Intellectessary or desirable for reconstruction of the Dec. 23, 1998	of record in said application shall any papers for ASSIGNEE, its E to ASSIGNEE'S full protection and title ectual Property Group, of the above ordation of this document. WITNESSES Idurashi Suguro		

PATENT

PAT-114 11/97

REEL: 9746 FRAME: 0664

ASSIGNMENT (Continued from page 1)

LISTING OF ADDITIONAL INVENTORS

INSERT NAME(S) OF INVENTOR(S)

(6)	(11)	
(7)	(12)	
(8)	(13)	
(9)	(14)	
(10)	(15)	

SIGNATURES OF ADDITIONAL INVENTORS/WITNESSES/DATES SIGNED

	<u>INVENTOR(S)</u>	DATE SIGNED	<u>WITNESSES</u>
3)	Hiromi Sano	Dec. 24, 1998	<u>WITNESSES</u> Idiroshi Sugino
Name:	Hiromi Sano		
		-	
Name:			
Name:			
Name.			
Name:			
Name:			
Name:			
Name:			
Harrie.			
Name:	***************************************		
Name:			
Name:			

PATENT PAT-114 11/97
RECORDED: 01/27/1999 REEL: 9746 FRAME: 0665