

Notice of References Cited	Application/Control No. 16/703,360	Applicant(s)/Patent Under Reexamination Annangi et al.	
	Examiner ADIL PARTAP S VIRK	Art Unit 3793	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-20180348349-A1	12-2018	OUZOUNOV; SOTIR FILIPOV	G01S7/52025	1/1
*	B	US-20210353260-A1	11-2021	SRINIVASA NAIDU; RAGHAVENDRA	A61B8/54	1/1
*	C	US-20190125298-A1	05-2019	ABOLMAESUMI; Purang	A61B8/4405	1/1
	D					
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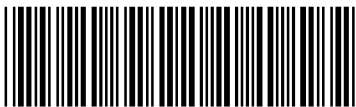
FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	CPC Classification
	N					
	O					
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NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
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*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
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Search Notes 	Application/Control No. 16/703,360	Applicant(s)/Patent Under Reexamination Annangi et al.
	Examiner ADIL PARTAP S VIRK	Art Unit 3793

CPC - Searched*		
Symbol	Date	Examiner
A61B8/5292	07/26/2022	Adil Partap Virk
A61B8/5238	07/26/2022	Adil Partap Virk
G06T7/0012	07/26/2022	Adil Partap Virk
G06T2207/10028	07/26/2022	Adil Partap Virk
G06T2207/10132	07/26/2022	Adil Partap Virk
G06T2207/10141	07/26/2022	Adil Partap Virk
G06T2207/20084	07/26/2022	Adil Partap Virk
G06T2207/30004	07/26/2022	Adil Partap Virk
A61B8/54	07/26/2022	Adil Partap Virk
A61B8/585	07/26/2022	Adil Partap Virk
A61B8/463	07/26/2022	Adil Partap Virk
A61B8/468	07/26/2022	Adil Partap Virk
A61B8/52	07/26/2022	Adil Partap Virk
A61B8/5246	07/26/2022	Adil Partap Virk
G06N3/08	07/26/2022	Adil Partap Virk

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.

/A.S.V./ Examiner, Art Unit 3793	/PATRICIA J PARK/ Primary Examiner, Art Unit 3793
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<i>Search Notes</i> 	Application/Control No. 16/703,360	Applicant(s)/Patent Under Reexamination Annangi et al.
	Examiner ADIL PARTAP S VIRK	Art Unit 3793

Search Notes		
Search Notes	Date	Examiner
Assignee Search	07/26/2022	Adil Partap Virk
Applicant Search	07/26/2022	Adil Partap Virk
Inventor Search	07/26/2022	Adil Partap Virk
Flip Search	07/26/2022	Adil Partap Virk
Non-Patent Literature Search	07/26/2022	Adil Partap Virk
Forward Backward Search	07/26/2022	Adil Partap Virk
Text Search	07/26/2022	Adil Partap Virk
Text Limited Classification Search	07/26/2022	Adil Partap Virk

Interference Search			
US Class/CPC Symbol	US Subclass/CPC Group	Date	Examiner

/A.S.V./ Examiner, Art Unit 3793	/PATRICIA J PARK/ Primary Examiner, Art Unit 3793
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Bibliographic Data

Application No: 16/703,360

Foreign Priority claimed: Yes No

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

Verified and Acknowledged: /ADIL PARTAP S VIRK/

Examiner's Signature

Initials

Title:

SYSTEM AND METHODS FOR JOINT SCAN PARAMETER SELECTION

FILING or 371(c) DATE	CLASS	GROUP ART UNIT	ATTORNEY DOCKET NO.
12/04/2019	600	3793	600137-US-1
RULE			

APPLICANTS

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Svein Arne Aase, Trondheim, NORWAY

Erik Normann Steen, Moss, NORWAY

CONTINUING DATA

FOREIGN APPLICATIONS

IF REQUIRED, FOREIGN LICENSE GRANTED**

12/26/2019

STATE OR COUNTRY

INDIA

ADDRESS

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Portland, OR 97209
UNITED STATES

FILING FEE RECEIVED

\$1,720

Doc code: IDS
 Doc description: Information Disclosure Statement (IDS) Filed

PTO/SB/08a (02-18)
 Approved for use through 11/30/2020. OMB 0651-0031
 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number	
	Filing Date	2019-12-04
	First Named Inventor	Pavan Annangi
	Art Unit	
	Examiner Name	
	Attorney Docket Number	600137-US-1

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	6102859	A	2000-08-15	Mo	
	2	6142943	A	2000-11-07	Mo et al.	
	3	7062714	B1	2006-06-13	Mo et al.	
	4	8235905	B2	2012-08-07	Lin et al.	
	5	8357094	B2	2013-01-22	Mo et al.	

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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	20140221832	A1	2014-08-07	El-Zehiry et al.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Not for submission under 37 CFR 1.99)	Application Number		
	Filing Date		2019-12-04
	First Named Inventor	Pavan Annangi	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		600137-US-1

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	1008863	EP	A2	2000-06-14	Mo		
	2	1097674	EP	A2	2001-05-09	Brouwer et al.		

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	YAP, M. et al., "Object Boundary Detection in Ultrasound Images," Proceedings of the 3rd Canadian Conference on Computer and Robot Vision (CRV'06), June 7, 2006, Quebec, Canada, 6 pages.	
	2	RANGARAJU, K. et al., "Review Paper on Quantitative Image Quality Assessment - Medical Ultrasound Images," International Journal of Engineering Research & Technology (IJERT), Vol. 1, No. 4, June 2012, 6 pages.	
	3	RAHMATULLAH, B. et al., "Integration of Local and Global Features for Anatomical Object Detection in Ultrasound," Proceedings of the 15th International Conference on Medical Image Computing and Computer-Assisted Intervention (MICCAI 2012), October 1, 2012, Nice, France, 8 pages.	
	4	EL-ZEHIRY, N. et al., "Learning the Manifold of Quality Ultrasound Acquisition," Proceedings of the 16th International Conference on Medical Imaging Computing and Computer-Assisted Intervention (MICCAI 2013), September 22, 2013, Nagoya, Japan, 8 pages.	
	5	ZHANG, L. et al., "Automatic image quality assessment and measurement of fetal head in two-dimensional ultrasound image," Journal of Medical Imaging, Vol. 4, No. 2, April 17, 2017, 11 pages.	

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

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

Application Number		
Filing Date		2019-12-04
First Named Inventor	Pavan Annangi	
Art Unit		
Examiner Name		
Attorney Docket Number	600137-US-1	

EXAMINER SIGNATURE

Examiner Signature	/ADIL PARTAP S VIRK/	Date Considered	07/26/2022
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*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		2019-12-04
	First Named Inventor	Pavan Annangi	
	Art Unit		
	Examiner Name		
	Attorney Docket Number		600137-US-1

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	/John D. Russell/	Date (YYYY-MM-DD)	2019-12-04
Name/Print	John D. Russell	Registration Number	47048

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.**

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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)).
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PE2E SEARCH - Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	British Equivalents	Time Stamp
L1	283121	(A61B8/5292 OR A61B8/5238 OR G06T7/0012 OR G06T2207/10028 OR G06T2207/10132 OR G06T2207/10141 OR G06T2207/20084 OR G06T2207/30004 OR A61B8/54 OR A61B8/585 OR A61B8/463 OR A61B8/468 OR A61B8/52 OR A61B8/5246 OR G06N3/08 OR A61B8/\$).cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:10 PM
L2	229	((("GE") near3 ("PRECISION") near3 ("HEALTHCARE") near3 ("LLC"))).AS,AANM.	(USPAT)	OR	ON	ON	2022/07/21 08:11 PM
L3	150	((("ANNANGI") near3 ("Pavan")) OR (("RAVISHANKAR") near3 ("Hariharan")) OR (("BJAASTAD") near3 ("Tore")) OR (("AASE") near3 ("Svein")) OR (("STEEN") near3 ("Erik"))).INV.	(US-PGPUB; USPAT; USOCR; EPO; JPO; DERWENT)	OR	ON	ON	2022/07/21 08:12 PM
L4	766	((("GE") near3 ("PRECISION") near3 ("HEALTHCARE") near3 ("LLC"))).AS,AANM.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:12 PM
L5	305	((("ANNANGI") near3 ("Pavan")) OR (("RAVISHANKAR") near3 ("Hariharan")) OR (("BJAASTAD") near3 ("Tore")) OR (("AASE") near3 ("Svein")) OR (("STEEN") near3 ("Erik"))).INV.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:12 PM
L6	66	(4 5) AND (quality near3 (metric value parameter condition))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:13 PM
L7	1	("20210169455").pn.	(US-PGPUB; USPAT)	OR	ON	ON	2022/07/21 08:13 PM
L8	8470	(quality near3 (metric value parameter	(US-PGPUB; USPAT; USOCR; FPRS; EPO;	OR	ON	ON	2022/07/21 08:19 PM

L9	396	condition)) AND ((set\$4 chang\$3 alter\$3 adjust\$3) WITH (frequency AND amplitude)) 8 AND 1	JPO) (US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:19 PM
L10	206	((cnn (neural near2 network)) WITH (quality metric value parameter condition)) AND 9	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:20 PM
L11	960	((cnn (neural near2 network)) WITH (quality metric value parameter condition)) AND A61b8/\$.cpc.	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:21 PM
L12	5164	(quality near3 (metric value parameter condition)) AND ((set\$4 chang\$3 alter\$3 adjust\$3) WITH (frequency AND (beamform\$3 depth)))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:22 PM
L13	29	11 AND 12	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/21 08:22 PM
L14	23601	(filter\$3 near5 (band\$1pass band\$1width)) AND (filter\$3 WITH (center near2 frequency))	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/26 07:45 AM
L15	592	1 AND 14	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/26 07:45 AM
L16	60	((filter\$3) WITH (acquisition)) AND 15	(US-PGPUB; USPAT; USOCR; FPRS; EPO; JPO)	OR	ON	ON	2022/07/26 07:45 AM

PE2E SEARCH - Search History (Interference)

There are no Interference searches to show.