

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/121,749	JUNKER ET AL. <i>AW</i>	
	<b>Examiner</b>	<b>Art Unit</b>	
	John H Le	2863	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Applicant's amended filed 11/21/2003.
2. ☒ The allowed claim(s) is/are 2, 5, 6, 8-14, 16-20 and 24-26.
3. ☒ The drawings filed on 12 April 2002 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.
5. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
  - (a) ☐ The translation of the foreign language provisional application has been received.
6. ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. **THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

7. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
8. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No. \_\_\_\_\_.
  - (b) ☐ including changes required by the proposed drawing correction filed \_\_\_\_\_, which has been approved by the Examiner.
  - (c) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No. \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the margin according to 37 CFR 1.121(d).

9. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| <input type="checkbox"/> Notice of References Cited (PTO-892)  | <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)          |
| <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                    | <input type="checkbox"/> Interview Summary (PTO-413), Paper No. _____             |
| <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08), Paper No. _____  | <input type="checkbox"/> Examiner's Amendment/Comment                             |
| <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit of Biological Material | <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
|  | <input type="checkbox"/> Other _____  |

***Response to Amendment***

1. Applicant's amendment filed 11/21/2003 has been entered and carefully considered.

Claims 1, 3-4, 7, 15, and 21-23 have been cancelled.

Claims 25-26 have been added.

Claims 2, 8-9, 16-17, and 19 have been amended.

***Reasons for Allowance***

2. Claims 2, 5-6, 8-14, 16-20, and 24-26 are allowed.
3. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 2, none of the prior art of record teaches or suggests the combination of a method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques, wherein the method comprising the steps of generating nondestructive examination data at a laboratory site, remote from the field site, from a specimen of the component undergoing non-destructive examination; and combining at least some of the nondestructive examination data collected at a field site, which data collected at the field site includes noise with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the non-destructive examination response to a selected flaw in a background representative of data collected at the field site. It is these limitations as they are claimed in the combination,

which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 25, none of the prior art of record teaches or suggests the combination of a method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques, wherein the method comprising the step separately calibrating the data collected at a field site and the data collected at a laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw, wherein the calibration is achieved by the steps of operating a first detector used at the field site to non-destructively test a first flaw and provide a first output indicative thereof and adjusting the first output received from the first detector in response to the first flaw by a first calibration factor to modify the first output to exhibit a first characteristic; and operating a second detector used at the laboratory site to non-destructively test a second flaw which is substantially identical to the first flaw and provide a second output indicative thereof and adjusting the second output by a second calibration factor to modify the second output to exhibit the first characteristic. It is these limitations as they are claimed in the combination, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 26, none of the prior art of record teaches or suggests the combination of a method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques, wherein the method

comprising the steps of separately calibrating the data collected at a field site and the data collected at a laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw; and storing the data collected at the field site along with a first calibration factor obtained from the step of calibrating the data collected at the field site and storing data collected at the laboratory site along with a second calibration factor obtained from the step of calibrating the data collected at the laboratory site. It is these limitations as they are claimed in the combination, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

#### ***Contact Information***

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is (703) 605-4361. The examiner can normally be reached on 9:00 - 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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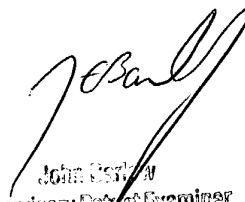
Art Unit: 2863

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

John H. Le

Patent Examiner-Group 2863

December 17, 2003



John H. Le  
Supervisory Patent Examiner  
Technology Center 2800

SEARCH			
Class	Sub.	Date	Exmr.
702	35	09/14/03	SL
	38		
	64		
	65		
	85		
	97		
324	220		
	222		
	228		
	234		
	238		
	600		
	601		
	605		
	611		
	612		
	613		
Update Search of the above		12/17/03	SL

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.
Interference Search of the above		12/17/03	SL

SEARCH NOTES		
(List databases searched. Attach search strategy inside.)		
	Date	Exmr.
EAST SEARCH TEXT SEARCH	09/14/03	SL

L Number	Hits	Search Text	DB	Time stamp
1	0	(non-destructive with examination with data) same (laboratory with site) same remote same (field with site)	USPAT; US-PGPUB	2003/12/17 16:44
2	1	(nondestructive with data) same examination same (laboratory with site) same remote same (field with site)	USPAT; US-PGPUB	2003/12/17 16:45
-	0	synthesizing with eddy with current with data	USPAT; US-PGPUB	2003/12/17 16:21
-	444	eddy with current with data	USPAT; US-PGPUB	2003/09/14 11:25
-	0	(eddy with current with data) and (eddy with current with field with data) and (eddy with current with laboratory with data) and (data with stream)	USPAT; US-PGPUB	2003/09/01 19:47
-	0	(eddy with current with data) and (eddy with current with field with data) and (eddy with current with laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:47
-	1	(eddy with current with data) and (field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:50
-	3	synthesiz\$3 with eddy with current with data	USPAT; US-PGPUB	2003/09/01 19:49
-	0	(synthesiz\$3 with eddy with current with data) and (field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:50
-	0	(synthesiz\$3 with eddy with current with data) and field and laboratory	USPAT; US-PGPUB	2003/09/01 19:50
-	113	eddy with current with field with data	USPAT; US-PGPUB	2003/09/15 16:58
-	0	(eddy with current with field with data) and (eddy with current with laboratory with data)	USPAT; US-PGPUB	2003/09/14 11:27
-	0	(eddy with current with field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/14 11:26
-	8	(eddy with current with field with data) and (eddy with current with test\$3 with data)	USPAT; US-PGPUB	2003/09/14 11:28
-	0	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and (data with stream)	USPAT; US-PGPUB	2003/09/14 11:29
-	0	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and stream	USPAT; US-PGPUB	2003/09/14 11:28
-	1	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and (data with flow)	USPAT; US-PGPUB	2003/09/14 11:29
-	1	(eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/15 17:26
-	0	(eddy with current with field with data) and (inject\$3 with field with data with test\$3)	USPAT; US-PGPUB	2003/09/15 17:00
-	1	(eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:48
-	1	((eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:25
-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/15 18:35
-	2	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:54
-	5	("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.	USPAT	2003/09/16 14:00

-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (eddy with current with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:24
-	1	((eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)) and (select\$3 with flaw) and (collect\$3 with data) and data	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:27
-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:59
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT	2003/09/16 14:00
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and (specimen with simulat\$3) and flaw	USPAT	2003/09/16 14:01
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and specimen and simulat\$3 and flaw	USPAT	2003/09/16 14:02
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and simulat\$3 and flaw	USPAT	2003/09/16 14:02
-	0	(specimen with data) and (reference with character\$6) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(reference with character\$6) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:20
-	0	(eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(eddy with current with probe) and (site with remote) and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	130	(eddy with current with probe) and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(specimen with data) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:22
-	3	((eddy with current with probe) and (steam with generator) and test\$3) and (specimen with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/19 14:02
-	0	(eddy with current) and (anser with system) and segment	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:49
-	0	(data with set) and calibration and (select\$3 with segment with inject\$3) and (identif\$3 with data with inject\$3) and flaw	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:52
-	0	(data with set) and calibration and (select\$3 with segment with inject\$3) and (identif\$3 with data with inject\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:52



-	1	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and flaw	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:27
-	0	(specimen with simulat\$3) same (select\$3 with flaws) and (laboratory with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:59
-	0	(specimen with simulat\$3) same (select\$3 with flaws) and (test\$3 with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:00
-	0	(specimen with simulat\$3) and (select\$3 with flaws) and (test\$3 with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:00
-	80	(eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:49
-	18	((eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)) and (steam with generator)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:49
-	1	((((eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)) and (steam with generator)) and (data with collect\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/19 13:44
-	2	4450405.pn.	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/19 13:44
-	1	(nondestructive with examination with data) same (laboratory with site) same remote same (field with site)	USPAT; US-PGPUB	2003/12/17 16:44



2863

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to:

MAIL STOP NON-FEE AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450 on 11/19/03

Heidi Bryant

11/19/03  
Date

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Examiner: John H. Le

Group Art Unit: 2863

In re Application of:  
WARREN R. JUNKER

Serial No. 10/121,749

Filed April 12, 2002

**EDDY CURRENT DATA UNION**

Attorney Docket No. RDM 2001-001

**RESPONSE TO OFFICE ACTION**

November 19, 2003

MAIL STOP NON-FEE AMENDMENT

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Sir:

**INTRODUCTORY COMMENTS**

Claim 1 currently stands rejected under 34 USC § 102(b) as being anticipated by Junker et al. (U.S. Patent No. 4,763,274). Claims 2-24 are currently rejected under 35 USC § 103(a) as being unpatentable over Junker et al. (U.S. Patent No. 4,763,274) in view of Wilkerson (U.S. Patent No. 5,623,204). However, the subject matter of Claims 7-9, 15-17 and 19-20 were indicated as allowable if rewritten in independent form.

### AMENDMENTS TO THE CLAIMS

1. (Cancelled)
2. (Currently Amended) A method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques comprising the steps of:
  - generating data collected at a field site of a component from non-destructive examination of the component, which data collected at the field site includes noise;
  - creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw;
  - generating nondestructive examination data at a laboratory site, remote from the field site, from the specimen of the component undergoing non-destructive examination; and
  - combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site.
3. (Cancelled)
4. (Cancelled)
5. (Original) The method of Claim 2 including the steps of separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw.

6. (Original) The method of Claim 2 including the steps of separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal orientation.
7. (Cancelled)
8. (Currently Amended) The method of Claim ~~7~~25 wherein the first characteristic is a selected amplitude of the first and second outputs so that the first and second outputs have corresponding amplitudes for substantially identical flaws.
9. (Currently Amended) The method of Claim ~~25~~7 wherein the first characteristic is a selected phase or orientation of the first and second outputs so that the first and second outputs have corresponding orientations for substantially identical flaws.
10. (Original) The method of Claim 2 wherein the data collected at the field site is collected from the step of operating a first eddy current detector and the data collected at the laboratory site is collected from the step of operating a second eddy current detector.
11. (Original) The method of Claim 10 wherein the first and second detectors are the same type of detector.
12. (Original) The method of Claim 11 wherein the first and second detectors are operated at substantially the same inspection frequencies.
13. (Original) The method of Claim 11 wherein the first and second detectors are operated at substantially the same data collection rates.

14. (Original) The method of Claim 5 wherein the first flow is provided by a calibration standard.
15. (Cancelled)
16. (Currently Amended) The method of Claim ~~15~~26 including the step of identifying in the stored data collected at the field site a location at which the data collected at the laboratory site is to be inserted and inserting the data collected at the laboratory site at the location.
17. (Currently Amended) The method of Claim ~~15~~26 including the step of identifying in the stored data collected at the laboratory site a location at which the data collected at the field site is to be inserted and inserting the data collected at the field site at the location.
18. (Original) The method of Claim 2 wherein only a segment of data collected at one of either the field site or the laboratory site is combined with data collected at the other of either the field site or the laboratory site.
19. (Currently Amended) The method of Claim ~~15~~26 including the step of operating on one of either the data collected at the field site or the data collected at the laboratory site that is to be inserted into the other of the data collected at the field site or the data collected at the laboratory site so that the inserted data is normalized to the same calibration factor as the data the normalized data is inserted in.
20. (Original) The method of Claim 19 including the step of storing at least some of the data collected at the laboratory site that is combined with at least some of the data collected at the field site as a file separate from the stored data collected at the field site and the stored data collected at the laboratory site.
- 21.-23. (Cancelled).

24. (Original) The method of Claim 2 wherein the specimen is a mathematical model and the data generated from the specimen is generated by the mathematical model.
25. (Re-presented – formerly dependent claim # 7) A method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques comprising the steps of:
- generating data collected at a field site of a component from non-destructive examination of the component;
  - creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw;
  - generating nondestructive examination data at a laboratory site from the specimen of the component undergoing non-destructive examination;
  - combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site; and
  - separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw, wherein the calibration is achieved by the steps of operating a first detector used at the field site to non-destructively test a first flaw and provide a first output indicative thereof and adjusting the first output received from the first detector in response to the first flaw by a first calibration factor to modify the first output to exhibit a first characteristic; and operating a second detector used at the laboratory site to non-destructively test a second flaw which is substantially identical to the first flaw and provide a second output indicative thereof and adjusting the second output by a second calibration factor to modify the second output to exhibit the first characteristic.

26. (Re-presented – formerly dependent claim # 15) A method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques comprising the steps of:
- generating data collected at a field site of a component from non-destructive examination of the component;
  - creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw;
  - generating nondestructive examination data at a laboratory site from the specimen of the component undergoing non-destructive examination;
  - combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site;
  - separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw; and
  - storing the data collected at the field site along with a first calibration factor obtained from the step of calibrating the data collected at the field site and storing data collected at the laboratory site along with a second calibration factor obtained from the step of calibrating the data collected at the laboratory site.

### **REMARKS**

Claims 1, 3, 4, 7, 15 and 21-23 have been cancelled. Claim 2 has been amended to include the subject matter previously presented in Claims 3 and 4 and Claims 25 and 26 have been added to represent the subject matter respectively previously provided in Claims 7 and 15 in independent form. Claims 8, 9, 16, 17 and 19 have been amended to correct their dependency in view of newly added Claims 25 and 26. In view of the foregoing, the rejection under 35 USC § 102 as to Claim 1 is no longer applicable. Similarly, the rejection of Claims 7-19, 15-17 and 19-20 is no longer applicable. Claim 2 remains rejected under 35 USC § 103(a) over Junker et al. in view of Wilkerson. In support of this rejection, the Examiner asserted that Junker et al. teach generating data collected at a field site of a component from nondestructive examination of the component, which Applicants concede. However, the Examiner further asserts that Junker et al teach generating a second set of nondestructive examination data at a laboratory site remote from the field site, which Applicant's dispute. In support of the latter assertion, the Examiner cites, in general, column 5, line 61 – line 26 of column 6 and more specifically, column 6, lines 1-9. The first general citation bears no further relevance than the specific citation cited in lines 1-6 which states:

In order to calibrate the system, a test section of tube 41 is connected to the end of a selected tube 19 [within the steam generator] so that the probe must pass through the test section as well as the tube to be tested. The test section 41 is provided with standard flaws in the form of 20%, 40%, 60% and 100% through wall holes of specified diameter, and a standard ring which surrounds the tube and generates an indication similar to that of a support plate 21. The signals generated by these test features are also recorded. Calibration information is taken each time the probe is changed, for each new reel of recorded data and periodically during the inspection.

Thus, it should be appreciated that Junker et al. does not teach generating two distinct sets of data at two remote locations, one at the component being examined, and the second at a remote laboratory site from a specimen. Furthermore, Wilkerson fails to cure the deficiency noted for Junker et al. Therefore, Claim 2 and Claims 5, 6, 10, 11, 12, 13, 14, 18, and 24, which either directly or



indirectly depend from Claim 2 patentably distinguish over Junker et al. in view of Wilkerson.

Claim 5 calls for the method of Claim 2 including separately calibrating the data collected at each site so they have the same relative signal strengths. Since Junker does not teach collecting data at two remote sites, it certainly does not teach calibrating the data at the several sites separately to the same signal strengths. Accordingly, Claim 5 further distinguishes for the individual limitation that it introduces.

Claim 6 calls for separately calibrating the data at each site to the same relative signal orientation. Neither Junker et al. or Wilkerson discuss calibrating to a given orientation. Therefore, Claim 6 further distinguishes for the individual limitation that it introduces. Claim 10 calls for the method of Claim 2 wherein each set of data is collected from a different eddy current detector. Claim 11 further defines that the detectors are of the same type and Claim 12 further specifies that the detectors are operated at the same frequencies and Claim 13 states the collection rates are the same for both detectors. In support of the rejection of Claims 10-13, the Examiner cites Junker et al. column 16, lines 18-42 which state:

The FLAWINAVB subroutine 152 is called the TSCLASS4 to look for flaws at the antivibration bars. In general, a normal AVB signature is characterized by a maximum voltage amplitude greater than about 0.4 volts on the 10 KHz absolute channel. The search for a "flaw" in this same segment is further restricted to only those "30" data points which correspond to the fastest excursion of the signal in that signature around the maximum. The flaw is detected by analyzing the fast excursion segment in the frequency 5 (mix) channel. The entire signature is viewed as a possible composite signature of individual tube flaw signals as well as noise signals. These components signals are identified as portions of the AVB fast excursion segment exhibiting a smooth rate of change of amplitude between successive data points. Such portions are constructed piece by piece from subsegments of the fast excursion segment by forming small triangles from three data points and measuring the area of the triangle formed thereby. Subsegments associated with the triangles having an area which is less than a certain threshold value are grouped into "extended" segments. The resulting signals

are likely to be a mixture of single segment and multi-segment signals formed by both tube flaws and noise.

The cited section does not apparently have anything to do with the subject matter of Claims 10-13. Nor could Applicant's find any other portion of Junker et al. relevant to the subject matter of Applicants' Claims 10-13. If the citation was made in error, it is respectfully requested that the rejection be withdrawn and reapplied, if appropriate, without making the Office Action final. Therefore, it is respectfully believed that Claims 10-13 further distinguish for the individual limitations that they introduce.

Claim 18 calls for combining of data collected at the various sites. The cited section of Junker et al. merely states that once a data segment is found to have valuable information, it is processed at the various collection frequencies. There is no mention of combining data obtained at different sites. Accordingly, Claim 18 patentably distinguishes further for the individual limitation that it introduces.

Claim 24 calls for the method of Claim 2 wherein the specimen is a mathematical model and the data generated from the specimen is generated by the mathematical model. Junker et al. does not describe, teach or show employing a mathematical model to simulate flaw data. The section cited by the Examiner (col. 12, lines 1-3) in support of this rejection states:

The COMPMIX subroutine 101 performs the mathematical mixing of two eddy current frequencies to generate the "mix" frequency, frequency 5. Frequency mixing is a means of canceling or suppressing one of two superimposed signatures which have been produced at the same tube location. In any current inspection, the specific application of mixing is to "cancel" the tube support plate signatures and, thus, expose any superimposed tube defect signatures. These signatures are given such attention because tube defects may occur in the support plate crevice.

Accordingly, the reference does not describe, teach, show or even imply the use of a mathematical model to simulate the flaw data. Accordingly, Claim 24 distinguishes further for the individual limitation that it introduces.

Accordingly, Applicants' have shown wherein Applicants' remaining Claims 2, 5, 6, 8-14, 16-20 and 24-26 separately, patentably distinguish over the references. Therefore, reconsideration, allowance and passage to issue of this application are respectfully requested.

Respectfully submitted,



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/121,749	04/12/2002	Warren R. Junker	RDM2001-001	4370
26353	7590	10/06/2003	EXAMINER	
WESTINGHOUSE ELECTRIC COMPANY, LLC			LE, JOHN H	
P.O. BOX 355			ART UNIT	
PITTSBURGH, PA 15230-0355			PAPER NUMBER	
			2863	

DATE MAILED: 10/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

AN

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/121,749	JUNKER ET AL	
	Examiner	Art Unit	
	John H Le	2863	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6, 10-14, 18 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 7-9, 15-17, 19 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 April 2002 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
    If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
    a) ☐ All   b) ☐ Some \*   c) ☐ None of:  
        1. ☐ Certified copies of the priority documents have been received.  
        2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
    \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
    a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                 | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). ____   |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)        | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____ | 6) <input type="checkbox"/> Other:  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Junker et al. (USP 4,763,274).

Regarding claim 1, Junker et al. '274 teach a digital computer performs a complete eddy current analysis of the tubes of a steam generator from data input to generation of a final report (Abstract). Junker et al. '274 teach the steps of generating eddy current field data (Figs. 1, 2)(e.g. Col. 5, lines 16-21); generating eddy current testing data, which read on eddy current laboratory data (e.g. Col. 5, line 61-Col. 6, line 15); and computer to create another channel of mixed data, which read on combining the testing data with the field data in a data stream (e.g. Col. 6, lines 34-68).

Regarding claim 21, Junker et al. '274 teach a digital computer performs a complete eddy current analysis of the tubes of a steam generator from data input to generation of a final report (Abstract). Junker et al. '274 teach nondestructive examination data to be used for training data analysts and/or testing inspection techniques (e.g. Col. 1, lines 6-14, 44-48, Col. 2, lines 22-43) comprising the steps of generating data collected at a first field site of a first component from non-destructive examination of the first component; generating nondestructive examination data at a

second field site of a second component undergoing nondestructive examination (e.g. Col.5, line 61- line 26); and combining at least some of the nondestructive examination data collected at the first field site with at least some of the nondestructive examination data collected at the second field site to establish a combined data train that reflects the nondestructive examination response in a background representative of data collected at the first and second field site (e.g. Col.1, lines 49-67, Col.6, lines 16-26, lines 34-68).

Regarding claims 22-23, Junker et al. '274 teach the first and second components are tubes in a steam generator 1, the first and second fields site are different location (Fig.1).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Junker et al. (USP 4,763,274) in view of Wilkerson (USP 5,623,204).

Regarding claim 2, Junker et al. '274 teach a digital computer performs a complete eddy current analysis of the tubes of a steam generator from data input to generation of a final report (Abstract). Junker et al. '274 teach nondestructive examination data to be used for training data analysts and/or testing inspection techniques (e.g. Col.1, lines 6-14, 44-48, Col. 2, lines 22-43) comprising the steps of generating data collected at a field site of a component from non-destructive

examination of the component; generating nondestructive examination data at a laboratory site (e.g. Col.5, line 61- line 26); and combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site (e.g. Col.1, lines 49-67, Col.6, lines 16-26, lines 34-68).

Regarding claim 3, Junker et al. '274 teach the laboratory site is remote from the field site (e.g. Col.6, lines 1-9).

Regarding claim 4, Junker et al. '274 teach the background is characteristic of noise present in data collected at the field site (e.g. Col.1, lines 31-33).

Regarding claim 5, Junker et al. '274 teach the steps of separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw.

Regarding claim 6, Junker et al. '274 teach the steps of separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal orientation.

Regarding claim 10, Junker et al. '274 teach the data collected at the field site is collected from the step of operating a first eddy current detector and the data collected



at the laboratory site is collected from the step of operating a second eddy current detector (e.g. Col.16, lines 18-42).

Regarding claim 11, Junker et al. '274 teach the first and second detectors are the same type of detector (e.g. Col.16, lines 18-42).

Regarding claim 12, Junker et al. '274 teach the first and second detectors are operated at substantially the same inspection frequencies (e.g. Col.16, lines 18-42).

Regarding claim 13, Junker et al. '274 teach the first and second detectors are operated at substantially the same data collection rates (e.g. Col.16, lines 18-42).

Regarding claim 14, Junker et al. '274 teach the first flaw is provided by a calibration standard (e.g. Col.6, lines 1-12).

Regarding claim 18, Junker et al. '274 teach only a segment of data collected at one of either the field site or the laboratory site is combined with data collected at the other of either the field site or the laboratory site (e.g. Col.7, lines 19-28).

Regarding claim 24, Junker et al. '274 teach a mathematical model (e.g. Col.12, lines 1-3).

Junker et al. '274 fail to teach step of creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw.

Wilkerson discloses an eddy current probe having an increased depth penetration. The probe includes an eddy current test assembly formed in the outer surface of a shoe that rotates within a tubular test specimen. The eddy current test assembly includes a pair of differentially connected electromagnetic coils whose axes are parallel and lie in a plane perpendicular to the direction of the axis of the tubular test

specimen. The probe assembly further includes a magnetically permeable backing plate that is closely adjacent to the innermost ends of the two differentially connected coils. The differentially connected coils are driven with a signal having a predominant frequency that is less than the natural resonant frequency of the eddy current probe. Flaws and other non-uniformities in the tubular test specimen are detected as the differentially connected coils travel pass the location of the flaw (Abstract).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to include Flaws and other non-uniformities in the tubular test specimen are detected as the differentially-connected coils travel pass the location of the flaw as taught by Wilkerson in a machine implemented analysis eddy current data of Junker et al. for the purpose of providing an eddy current test probe with enhanced test depth performance in space-limited applications such as inside tubular test specimens and a test coil assembly with enhanced sensitivity to flaws in test specimens (Wilkerson, Col.7, lines 53-59).

***Allowable Subject Matter***

5. Claims 7-9, 15-17, and 19-20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 7, none of the prior art of record teaches or suggests the combination of a method of synthesizing nondestructive examination data to be used

for training data analysts and/or testing inspection techniques, wherein the method comprising the steps of generating data collected at a field site of a component from non-destructive examination of the component; creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw; generating nondestructive examination data at a laboratory site from the specimen of the component undergoing non-destructive examination; combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site; and separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw, wherein the calibration is achieved by the steps of operating a first detector used at the field site to non-destructively test a first flaw and provide a first output indicative thereof and adjusting the first output received from the first detector in response to the first flaw by a first calibration factor to modify the first output to exhibit a first characteristic; and operating a second detector used at the laboratory site to non-destructively test a second flaw which is substantially identical to the first flaw and provide a second output indicative thereof and adjusting the second output by a second calibration factor to modify the second output to exhibit the first characteristic. It is these limitations as they

are claimed in the combination, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

Regarding claim 15, none of the prior art of record teaches or suggests the combination of a method of synthesizing nondestructive examination data to be used for training data analysts and/or testing inspection techniques, wherein the method comprising the steps of generating data collected at a field site of a component from non-destructive examination of the component; creating a specimen that simulates the component undergoing non-destructive examination with a selected flaw; generating nondestructive examination data at a laboratory site from the specimen of the component undergoing non-destructive examination; combining at least some of the nondestructive examination data collected at the field site with at least some of the nondestructive examination data collected at the laboratory site to establish a combined data train that reflects the nondestructive examination response to the selected flaw in a background representative of data collected at the field site; separately calibrating the data collected at the field site and the data collected at the laboratory site so that the data collected at the field site and the data collected at the laboratory site have the same relative signal strengths corresponding to a first flaw; and storing the data collected at the field site along with a first calibration factor obtained from the step of calibrating the data collected at the field site and storing data collected at the laboratory site along with a second calibration factor obtained from the step of calibrating the data collected at the laboratory site. It is these limitations as they

are claimed in the combination, which have not been found, taught or suggested in the prior art of record, that make these claims allowable over the prior art.

***Other Prior Art***

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure:

Sapia (USP 4,942,545) discloses calibration of an eddy current probe and associated data acquisition and analysis system is accomplished using a step tube sample having a nominal diameter portion substantially equivalent to a nominal field tube.

Howard (USP 4,450,405) discloses an analog signal produced in response to eddy current probing of a test part is digitized by an analog-to-digital processor and then entered into a microprocessor-based computer.

Flora et al. (USP 4,207,520) disclose a multiple frequency digital eddy current inspection system.

Holt et al. (USP 4,194,149) disclose a method for generating the eddy current signature of a flaw in a tube proximate a contiguous member, which obscures the flaw signal.

***Contact Information***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John H. Le whose telephone number is (703) 605-4361. The examiner can normally be reached on 9:00 - 5:30.

Art Unit: 2863

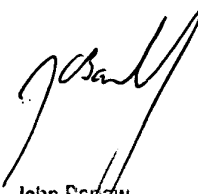
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E. Barlow can be reached on (703) 308-3126. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

John H. Le

Patent Examiner-Group 2863

September 19, 2003



John Barlow  
Supervisory Patent Examiner  
Technology Center 2800

<b>Notice of References Cited</b>	Application/Control No. 10/121,749	Applicant(s)/Patent Under Reexamination JUNKER ET AL.	
	Examiner John H Le	Art Unit 2863	Page 1 of 1

**U.S. PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-5623204 ✓	04-1997	Wilkerson	324/228
	B	US-4763274 ✓	08-1988	Junker et al.	702/38
	C	US-4942545 ✓	07-1990	Sapia	702/97
	D	US-4450405 ✓	05-1984	Howard	324/234
	E	US-4207520 ✓	06-1980	Flora et al.	324/238
	F	US-4194149 ✓	03-1980	Holt et al.	324/220
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

**FOREIGN PATENT DOCUMENTS**

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

**NON-PATENT DOCUMENTS**

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	
	V	
	W	
	X	

\*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)  
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

U.S. Patent and Trademark Office  
PTO-892 (Rev. 01-2001)

Notice of References Cited

Part of Paper No. 3

L Number	Hits	Search Text	DB	Time stamp
-	0	synthesizing with eddy with current with data	USPAT; US-PGPUB	2003/09/01 19:49
-	444	eddy with current with data	USPAT; US-PGPUB	2003/09/14 11:25
-	0	(eddy with current with data) and (eddy with current with field with data) and (eddy with current with laboratory with data) and (data with stream)	USPAT; US-PGPUB	2003/09/01 19:47
-	0	(eddy with current with data) and (eddy with current with field with data) and (eddy with current with laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:47
-	1	(eddy with current with data) and (field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:50
-	3	synthesiz\$3 with eddy with current with data	USPAT; US-PGPUB	2003/09/01 19:49
-	0	(synthesiz\$3 with eddy with current with data) and (field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/01 19:50
-	0	(synthesiz\$3 with eddy with current with data) and field and laboratory	USPAT; US-PGPUB	2003/09/01 19:50
-	113	eddy with current with field with data	USPAT; US-PGPUB	2003/09/15 16:58
-	0	(eddy with current with field with data) and (eddy with current with laboratory with data)	USPAT; US-PGPUB	2003/09/14 11:27
-	0	(eddy with current with field with data) and (laboratory with data)	USPAT; US-PGPUB	2003/09/14 11:26
-	8	(eddy with current with field with data) and (eddy with current with test\$3 with data)	USPAT; US-PGPUB	2003/09/14 11:28
-	0	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and (data with stream)	USPAT; US-PGPUB	2003/09/14 11:29
-	0	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and stream	USPAT; US-PGPUB	2003/09/14 11:28
-	1	((eddy with current with field with data) and (eddy with current with test\$3 with data)) and (data with flow)	USPAT; US-PGPUB	2003/09/14 11:29
-	1	(eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/15 17:26
-	0	(eddy with current with field with data) and (inject\$3 with field with data with test\$3)	USPAT; US-PGPUB	2003/09/15 17:00
-	1	(eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:48
-	1	((eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:25
-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/15 18:35
-	2	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:54
-	5	("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.	USPAT	2003/09/16 14:00

Search History 9/19/03 1:44:08 PM Page 1

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-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (eddy with current with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:24
-	1	((eddy near5 current near5 probe) and (field near2 data) and ((test\$3 or laboratory) near2 data) and noise and calibrat\$3 and (eddy near1 current)) and (select\$3 with flaw) and (collect\$3 with data) and data	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:27
-	0	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 13:59
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and (specimen with simulat\$3) and (select\$3 with flaw)	USPAT	2003/09/16 14:00
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and (specimen with simulat\$3) and flaw	USPAT	2003/09/16 14:01
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and specimen and simulat\$3 and flaw	USPAT	2003/09/16 14:02
-	0	((("3693075"   "4194149"   "4207520"   "4631688"   "4663727").PN.) and simulat\$3 and flaw	USPAT	2003/09/16 14:02
-	0	(specimen with data) and (reference with character\$6) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(reference with character\$6) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:20
-	0	(eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(eddy with current with probe) and (site with remote) and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	130	(eddy with current with probe) and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:21
-	0	(specimen with data) and (eddy with current with probe) and (site with remote) and field and (steam with generator) and test\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/16 14:22
-	3	((eddy with current with probe) and (steam with generator) and test\$3) and (specimen with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:48
-	0	(eddy with current) and (anser with system) and segment	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:49
-	0	(data with set) and calibration and (select\$3 with segment with inject\$3) and (identif\$3 with data with inject\$3) and flaw	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:52
-	0	(data with set) and calibration and (select\$3 with segment with inject\$3) and (identif\$3 with data with inject\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:52
-	1	((nondestructive or non-destructive) near2 examination) and (specimen with simulat\$3) and flaw	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:27

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-	0	(specimen with simulat\$3) same (select\$3 with flaws) and (laboratory with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 07:59
-	0	(specimen with simulat\$3) same (select\$3 with flaws) and (test\$3 with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:00
-	0	(specimen with simulat\$3) and (select\$3 with flaws) and (test\$3 with site) and (combin\$3 with data)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 08:00
-	80	(eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:49
-	18	((eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)) and (steam with generator)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:49
-	1	((eddy near5 current near5 probe) and tube\$2 and (eddy with current with detector)) and (steam with generator)) and (data with collect\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT	2003/09/18 09:49

SEARCH			
Class	Sub.	Date	Exmr.
702	35	09/14/13	82
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324	220		
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	605		
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	612		
	613		

(List databases searched. Attach search strategy inside.)

	Date	Exmr.
EAST SEARCH TEXT SEARCH	09/14/03	JL
AVAILABLE		

INTERFERENCE SEARCHED			
Class	Sub.	Date	Exmr.

BEST AVAILABLE