



Plumbing the Depths of Examiner Search (il)-Logic A Patent Searching Perspective

Dominic DeMarco
DeMarco Intellectual Property, LLC

Patent Information Users Group (PIUG)
NE Meeting – October 11, 2011

The first caveat:

Examiners search for different reasons than we do as professional patent searchers.

They are decision makers and are strongly incentivized to stop a search when a decision may be made.

Our discussion targets:

- 1) Accessing Examiner Search Logic
- 2) Examiner Database Analysis
- 3) Sample Examiner Strategy Analysis
- 4) General Examiner Strategy Analysis

We are not reviewing the 'Reason for Allowance', 'Applicant Arguments' or the 'Examiner Rejections' which are additional valuable material within a file wrapper.

1) Accessing Examiner Search Logic:

Available via Public PAIR for most issued patents and PG-Publications since 2001

<http://portal.uspto.gov/external/portal/pair>

(12) **United States Patent**
Greenberg et al.

(10) **Patent No.:** **US 8,000,000 B2**
(45) **Date of Patent:** ***Aug. 16, 2011**

(54) **VISUAL PROSTHESIS**

(75) Inventors: **Robert J. Greenberg**, Los Angeles, CA (US); **Kelly H. McClure**, Simi Valley, CA (US); **Arup Roy**, Valencia, CA (US)

(73) Assignee: **Second Sight Medical Products, Inc.**, Sylmar, CA (US)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(h) by 206 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **11/874,690**

(22) Filed: **Oct. 18, 2007**

(65) **Prior Publication Data**

US 2008/0262568 A1 Oct. 23, 2008

Related U.S. Application Data

(60) Provisional application No. 60/852,875, filed on Oct. 19, 2006.

(51) **Int. Cl.**
A61N 1/372 (2006.01)

(52) **U.S. Cl.** 607/60; 607/53

(58) **Field of Classification Search** 623/6.63; 607/5, 17, 53-57, 62, 60

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,573,481 A 3/1986 Bullara
4,612,934 A * 9/1986 Borkan 607/62
4,628,933 A 12/1986 Michelson

4,837,049 A 6/1989 Byers et al.
5,109,844 A 5/1992 de Juan, Jr. et al.
5,215,088 A 6/1993 Normann et al.
5,569,307 A * 10/1996 Schulman et al. 607/56
5,935,155 A 8/1999 Humayun et al.
6,400,989 B1 6/2002 Eckmiller
6,458,157 B1 * 10/2002 Suanning 623/6.63
7,818,061 B1 * 10/2010 Palmer 607/32
2005/0078846 A1 * 4/2005 Single 381/326
2006/0247754 A1 11/2006 Greenberg et al.

FOREIGN PATENT DOCUMENTS

WO WO 02/40095 A1 5/2002

OTHER PUBLICATIONS

Eugene De Juan, Retinal Tacks, American Journal of Ophthalmology 99: pp. 272-274, Mar. 1985.

* cited by examiner

Primary Examiner — Carl [REDACTED]

Assistant Examiner — Luther [REDACTED]

(74) *Attorney, Agent, or Firm* — Scott B. Dunbar; Alessandro Steinfl

(57) **ABSTRACT**

A visual prosthesis apparatus and a method for limiting power consumption in a visual prosthesis apparatus. The visual prosthesis apparatus comprises a camera for capturing a video image, a video processing unit associated with the camera, the video processing unit configured to convert the video image to stimulation patterns, and a retinal stimulation system configured to stop stimulating neural tissue in a subject's eye based on the stimulation patterns when an error is detected in a forward telemetry received from the video processing unit.

12 Claims, 16 Drawing Sheets



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11/874,690		VISUAL PROSTHESIS					S438-USA		
Select New Case	Application Data	Transaction History	Image File Wrapper	Patent Term Adjustments	Continuity Data	Fees	Published Documents	Address & Attorney/Agent	Display References

Bibliographic Data

Application Number:	11/874,690	Customer Number:	-
Filing or 371 (c) Date:	10-18-2007	Status:	Patented Case
Application Type:	Utility	Status Date:	07-27-2011
Examiner Name:	 , LUTHER G	Location:	ELECTRONIC
Group Art Unit:	3766	Location Date:	-
Confirmation Number:	3005	Earliest Publication No:	US 2008-0262568 A1
Attorney Docket Number:	S438-USA	Earliest Publication Date:	10-23-2008
Class / Subclass:	607/054	Patent Number:	8,000,000
First Named Inventor:	Robert J. Greenberg , Los Angeles, CA (US)	Issue Date of Patent:	08-16-2011

Title of Invention: VISUAL PROSTHESIS

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Luther, I apologize. I am not picking on you on purpose.



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Available Documents

Mail Room Date	Document Code	Document Description	Document Category	Page Count	PDF
07-27-2011	ISSUE.NTF	Issue Notification	PROSECUTION	1	<input type="checkbox"/>
06-27-2011	NOA	Notice of Allowance and Fees Due (PTOL-85)	PROSECUTION	6	<input type="checkbox"/>
06-27-2011	FWCLM	Index of Claims	PROSECUTION	1	<input type="checkbox"/>
06-27-2011	IIFW	Issue Information including classification, examiner, name, claim, renumbering, etc.	PROSECUTION	1	<input type="checkbox"/>
06-27-2011	SRFW	Search information including classification, databases and other search related notes	PROSECUTION	1	<input checked="" type="checkbox"/>
06-27-2011	IFEE	Issue Fee Payment (PTO-85B)	PROSECUTION	1	<input type="checkbox"/>
06-27-2011	WFEE	Fee Worksheet (SB06)	PROSECUTION	2	<input type="checkbox"/>
06-27-2011	N417	EFS Acknowledgment Receipt	PROSECUTION	2	<input type="checkbox"/>
06-08-2011	1449	List of References cited by applicant and considered by examiner	PRIOR ART	1	<input type="checkbox"/>
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04-08-2011	FWCLM	Index of Claims	PROSECUTION	1	<input type="checkbox"/>
04-08-2011	BIB	Bibliographic Data Sheet	PROSECUTION	1	<input type="checkbox"/>
04-08-2011	SRNT	Examiner's search strategy and results	PROSECUTION	4	<input checked="" type="checkbox"/>
04-08-2011	IIFW	Issue Information including classification, examiner, name, claim, renumbering, etc.	PROSECUTION	1	<input type="checkbox"/>

11874690

PLUS Search Results for S/N 11874690, Searched Thu Feb 26 11:56:34 EST 2009

The Patent Linguistics Utility System (PLUS) is a USPTO automated search system for U.S. Patents from 1971 to the present PLUS is a query-by-example search system which produces a list of patents that are most closely related linguistically to the application searched. This search was prepared by the staff of the Scientific and Technical Information Center, SIRA.

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EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
S18	21698543	@ad< "20061019"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/02/26 14:16
S21	27975	(600/16-18.ccls. or 600/508-528.ccls. or 607/1-76.ccls. or 607/115- 156.ccls.)	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/02/26 14:23

		error)				
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S43	111	S40 and error and implant	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:13
S44	71	S43 and sleep	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:14
S46	65	S21 and S18 and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) with error and (power with management))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:25
S47	1	607/55-57.ccls. and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) with error and (power with management))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 17:13
S48	22	607/55-57.ccls. and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) with error and power)	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 17:16


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L17	26936	((spinal with cord with stimulat\$4) or SCS or cochlea\$4 or retina\$4) and (telemetry or communicat \$4) and (respond or (back with telemetry) or error or ((inaccurate or faulty or bad) with data)) and 3	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L18	5516	17 and (((stop or down) with power) or deactivate or idle)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L19	257	17 and (external with (((stop or down) with power) or deactivate or idle))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L20	44	19 and cochlea\$4	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L21	27	19 and retina\$4	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:35

EAST Search History

EAST Search History (Prior Art)

Ref #	Hits	Search Query	DBs	Default	Plurals	Time Stamp
S45	883	607/60.ccls. and @ad<"20061019"	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:54
S46	353	607/60.ccls. and @ad<"20061019" and ((back with telemetry) or feedback)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S47	96	607/60.ccls. and @ad<"20061019" and ((back with telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S48	32	607/60.ccls. and @ad<"20061019" and ((back near telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S49	28	607/60.ccls. and @ad<"20061019" and ((back adj telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S50	5	607/60.ccls. and @ad<"20061019" and ((back adj telemetry)) and retinal	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:56
S51	12	607/60.ccls. and @ad<"20061019" and ((back adj telemetry)) and error	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:57
S52	53	("4166470" "4267410"	US-PGPUB;	OR	ON	2010/11/03

Search Notes 	Application/Control No. 11874690	Applicant(s)/Patent Under Reexamination GREENBERG ET AL.
	Examiner LUTHER G [REDACTED]	Art Unit 3766

SEARCHED			
Class	Subclass	Date	Examiner
623	6.63	2/27/2009	LB
607	5, 17, 53-57, 62	2/27/2009	LB
607	60	11/4/2010	LB

SEARCH NOTES		
Search Notes	Date	Examiner
IDS Search	2/27/2009	LB
PLUS Search	2/27/2009	LB
Assignee Search	2/27/2009	LB
Inventor Name Search	2/27/2009	LB
Class / Subclass Search	2/27/2009	LB
Forward / Backward Citation Search	2/27/2009	LB
East Text Search (US Patents, PG Pubs, US OCR Database, European Patents)	2/27/2009	LB
Updated East Text Search (US Patents, PG Pubs, US OCR Database, European Patents)	7/14/2009	LB
Updated East Text Search (US Patents, PG Pubs, US OCR Database, European Patents)	11/4/2010	LB

2) Examiner Database Analysis (EAST)

- PLUS System – An automated LSA tool – no EAST integration
- US-PGPUB – US Pre-Grant Publications (2001-2011)
- USPAT – Issued US Patents (full text searchable back to the 1970s)
- USOCR – OCR scanned images for US Patents (1920-1976)
- EPO – Abstracts of select European documents (19??-2010)
 - CH-'78, DE-'81, EP-'78, FR-'84, GB-'00, and WO-'78
- JPO – Abstracts of Japanese documents (1976-2011)
- Derwent – Derwent World Patent Index*
- UPAD – Unpublished US Patent Applications

* Examiner Access to Derwent is watered down.

The big things you should note:

- Full text searching is available only for US patents and publications back to 1976.
- Only abstract searching is available for non-US documents. (No full text of PCT documents!)
- US Examiners have no access to old non-US prior art.
- Not shown: The DWPI database only became available to US Examiners in the past few years. Most have no idea how to use it!

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- Truncation
 - \$ = Unlimited characters
 - \$1 = Zero or 1 character
- Proximity Operators: (in order of execution)
 - Adj# = Within # words, order specific (default is 1)
 - Near# = Within # words (default is 1)
 - With = Within a single sentence
 - Same = Within a single paragraph
- Section Operators: (can be used in combination)
 - Title = .ti.
 - Abstract = .ab.
 - Claims = .clm.

Commands Available to Examiners (Page 2)

- Classification Operators:
 - Current US Primary Classification = .cor. or .ccor.
 - Current US Cross Classification = .cxr. or .ccxr.
 - Current US Classification = .cls.

- Other Common Operators:
 - Assignee = .as. or .asn.
 - Publication Number = .pn. or .did.
 - Application Date = @ad<
 - Publication Date = @pd>

There are others, but this is a summary of the common ones.

3) Examiner Strategy Analysis

With all due respect to Mr. Luther [REDACTED], an Assistant Examiner, and Mr. Carl [REDACTED], the signatory Examiner, we will review the publicly available search history for US 8,000,000.

This is what you can do for any US patent or application of particular interest available via Public PAIR (18 months after filing).

The second caveat:

The validity of this patent is not being questioned.

It is merely a guinea pig to demonstrate the analysis of Examiner search logic that can be done.

No search is perfect. All searches are a balance of inclusion and exclusion.

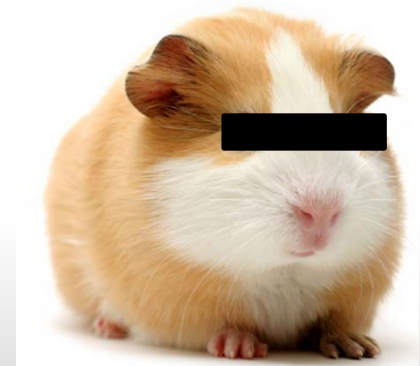


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References Cited

U.S. PATENT DOCUMENTS

4,573,481	A	3/1986	Bullara	
4,612,934	A *	9/1986	Borkan	607/62
4,628,933	A	12/1986	Michelson	
4,837,049	A	6/1989	Byers et al.	
5,109,844	A	5/1992	de Juan, Jr. et al.	
5,215,088	A	6/1993	Normann et al.	
5,569,307	A *	10/1996	Schulman et al.	607/56
5,935,155	A	8/1999	Humayun et al.	
6,400,989	B1	6/2002	Eckmiller	
6,458,157	B1 *	10/2002	Suaning	623/6.63
7,818,061	B1 *	10/2010	Palmer	607/32
2005/0078846	A1 *	4/2005	Single	381/326
2006/0247754	A1	11/2006	Greenberg et al.	

The Examiner only cited US documents.

Note the varied classification of the cited documents and their dates!

FOREIGN PATENT DOCUMENTS

WO WO 02/40095 A1 5/2002

OTHER PUBLICATIONS

Eugene De Juan, Retinal Tacks, American Journal of Ophthalmology 99: pp. 272-274, Mar. 1985.

* cited by examiner

Ref #s (US only)

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20080097548 99
20080262568 99
7079900 93
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20080077196 93
20080097555 93
20080249588 93
20080275528 93
20080294224 93
20090005835 93
6393327 84
6647297 84

5935155 74

Score assigned by the Semantic tool

None of these references were used by the Examiner. Not even the ones ranked with a 99 out of 100. The Examiner has no control of this and must review the listed references.

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S18	21698543	@ad< "20061019"	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/02/26 14:16
S21	27975	(600/16-18.ccls. or 600/508-528.ccls. or 607/1-76.ccls. or 607/115- 156.ccls.)	US-PGPUB; USPAT; USOCR; DERWENT	OR	ON	2009/02/26 14:23
S40	440	error) S21 and S18 and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) and (power with management))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 15:56
S43	111	S40 and error and implant	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:13
S44	71	S43 and sleep	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:14

1) The @ad<"20061019" command accidentally eliminates pre-1976 references which do not have an application date field.

2) Notice the database selection discrepancy. Derwent has been deactivated which limits the searching to US documents only.

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Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
		error)				
S40	440	S21 and S18 and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) and (power with management))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 15:56
S43	111	S40 and error and implant	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:13
S44	71	S43 and sleep	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:14
S46	65	S21 and S18 and ((synchroniz\$4 or transmission or handshak \$4 or telemetry) with error and (power with management))	US-PGPUB; USPAT; USOCR	OR	ON	2009/02/26 16:25
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Not likely

Likely reviewed

Likely reviewed

3) Time Stamps

3) Gaps between time stamps can help you determine which sets of references have been reviewed.

EAST Search History

EAST Search History (Prior Art)

4) Changed databases again.


Ref #	Hits	Search Query	DBs	Default	Plurals	Time Stamp
S45	883	607/60.ccls. and @ad<"20061019"	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:54
S46	353	607/60.ccls. and @ad<"20061019" and ((back with telemetry) or feedback)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S47	96	607/60.ccls. and @ad<"20061019" and ((back with telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S48	32	607/60.ccls. and @ad<"20061019" and ((back near telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S49	28	607/60.ccls. and @ad<"20061019" and ((back adj telemetry))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:55
S50	5	607/60.ccls. and @ad<"20061019" and ((back adj telemetry)) and retinal	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2010/11/03 16:56

5

4

5) Queries not reviewed based upon the continual strategy refinement. Removed "feedback" and limited to "back adj telemetry".

*Less than 500 US patents or PG-Pubs use that phrase

Search Notes 	Application/Control No. 11874690	Applicant(s)/Patent Under Reexamination GREENBERG ET AL.
	Examiner LUTHER G [REDACTED]	Art Unit 3766

6


SEARCHED			
Class	Subclass	Date	Examiner
623	6.63	2/27/2009	LB
607	5, 17, 53-57, 62	2/27/2009	LB
607	60	11/4/2010	LB

6) There are over 4,000 references in this range of Subclasses when crossed with “@ad<=20061019”. No documentation of having performed that date limitation or crossing them with key word limitations is shown in the search history. Do you think they were reviewed in their entirety?

4) General Examiner Strategy Analysis

No more picking on Luther.

Thousands of US file wrappers were reviewed over the past two years. There are some generalities that can be made with regard to the manner in which US Examiners search patents and utilize the databases available to them.

As with all generalities, this does not apply to every Examiner. Some are fantastic patent searchers.

Database Choices (part 1)

Quote-Unquote I have received from more than one Examiner:

“I turn off the foreign databases because they give me too much stuff to go through.”

In reviewing several thousand file wrappers, in less than 1% of these cases has an Examiner utilized the International Patent Classification system (IPC). 0% use the European System (ECLA) because they are unable to do so.

Database Choices (part 2)

Examiners are expected to search the patent literature.

For difficult searches or specific technologies (Business Methods), they are expected to search non-patent literature.

This is often outsourced to in-house experts within the USPTO (employees via STIC and/or contractors via ASRC). Thus, the Examiner with their intimate knowledge of the case is often not the person performing an NPL search if and when one is done.

Patent Section Limitations

The other way Examiners eliminate the opportunity for “foreign stuff” to clutter their queries is by never limiting their searching to titles and abstracts. (.ti,ab.)

A US document has approximately 10,000 words. A non-US abstract has approximately 100 words. Which do you think is more likely to be found when a search for ‘A and B and C and D’ is performed? Does that mean the non-US document is not relevant?

This also reduces the utility of the Derwent database and their value-added abstracting.

‘Field of Classification Search’

- (52) **U.S. Cl.** 607/60; 607/53
(58) **Field of Classification Search** 623/6.63;
607/5, 17, 53–57, 62, 60

See application file for complete search history.

It is commonly accepted that an Examiner will document a ‘Field of Classification Search’ if text searching encompassed those subclasses. This means that these subclasses were probably not reviewed in their entirety.

Proximity Operator Usage

Examiners preferentially search broad to narrow.

To narrow, they add limitations rather than modifying the proximity operators. Example:

A and B = 3000 hits	... too many to review
Examiner will choose:	A and B and C and D = 300 hits
Will not choose:	A same B = 400 hits
Will not choose:	A with B = 200 hits

The over reliance upon the 'and' command loses much of the context of key word or text based searching.

EAST Search History

Ref #	Hits	Search Query	DBs	Default Operator	Plurals	Time Stamp
L3	5861034	@ad<"20061019"	US-PGPUB; USPAT; USOCR	OR	ON	2009/07/14 14:15
L17	26936	((spinal with cord with stimulat\$4) or SCS or cochlea\$4 or retina\$4) and (telemetry or communicat \$4) and (respond or (back with telemetry) or error or ((inaccurate or faulty or bad) with data)) and 3	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L18	5516	17 and (((stop or down) with power) or deactivate or idle)	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L19	257	17 and (external with (((stop or down) with power) or deactivate or idle))	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L20	44	19 and cochlea\$4	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:34
L21	27	19 and retina\$4	US-PGPUB; USPAT; USOCR; EPO	OR	ON	2009/07/14 16:35

(A₁ or A₂ or A₃) and
B and C

and D

and E

and A₂
or
and A₃

8

- 7) Too many Booleans begat an error. No art to A₁ was likely reviewed.
- 8) Not even mentioning the missing database... Sorry Luther.

Conclusions

- A) The publicly available Examiner Search Logic is easily reviewable.
- B) Reviewing this Logic will demonstrate how specific references were identified.
- C) Likewise, it can provide a road map to identify search areas that were not considered should you need to question the validity of a patent.
- D) Examiner Search Logic can provide quality talking points if you need to defend your patentability search practices. **Do you really want Luther doing the only searching on important applications?**



Thank you for your time!

Questions?

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