



Software for
Business Intelligence

BizInt Smart Charts

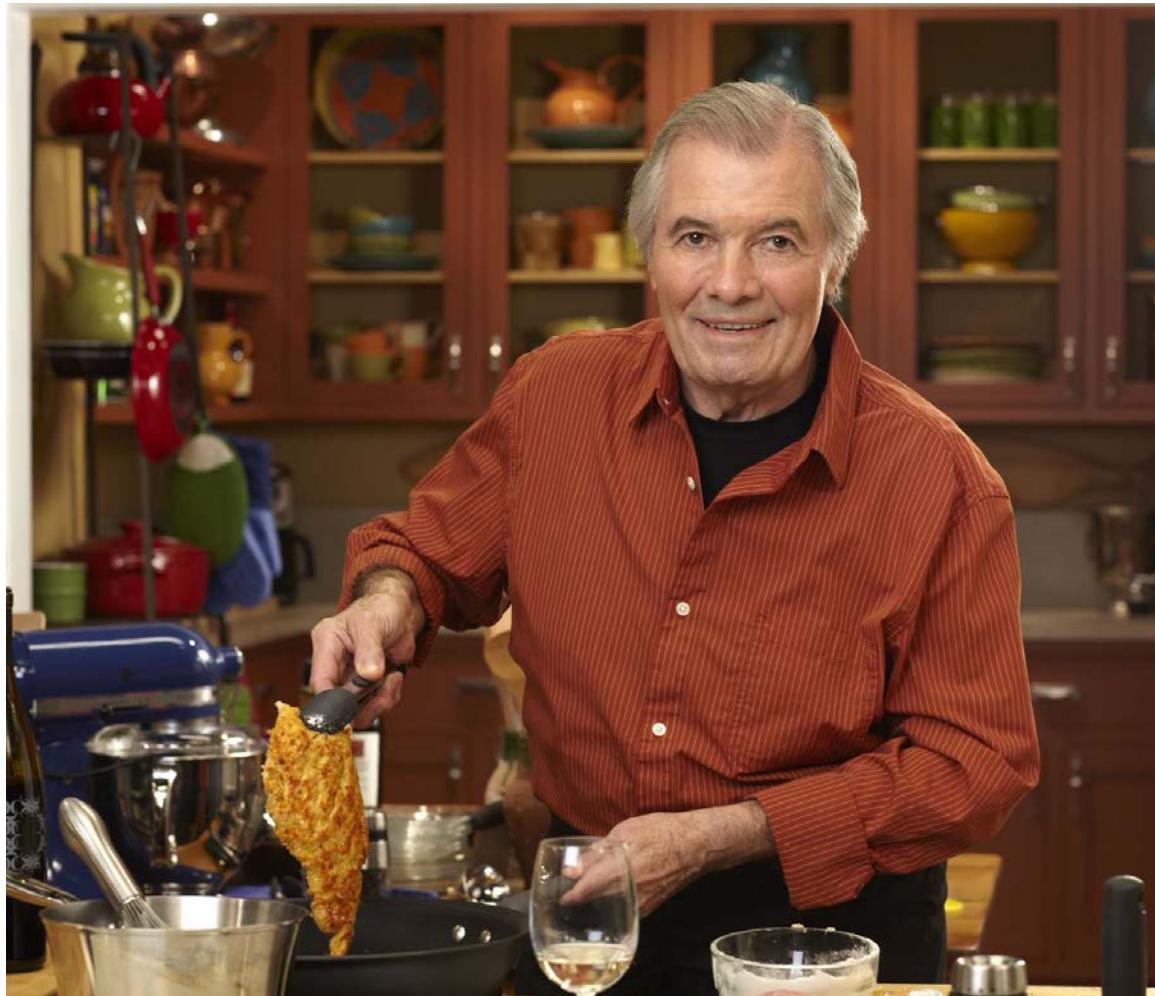
Patents | Drug Pipelines | Clinical Trials | Sequences

Creating a Recipe for Legal Status Reports

2014 PIUG Annual Meeting
30 April 2014

John Willmore, Iron Chef Software

Jacques Pepin



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Julia Child



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Dan Aykroyd as Julia Child



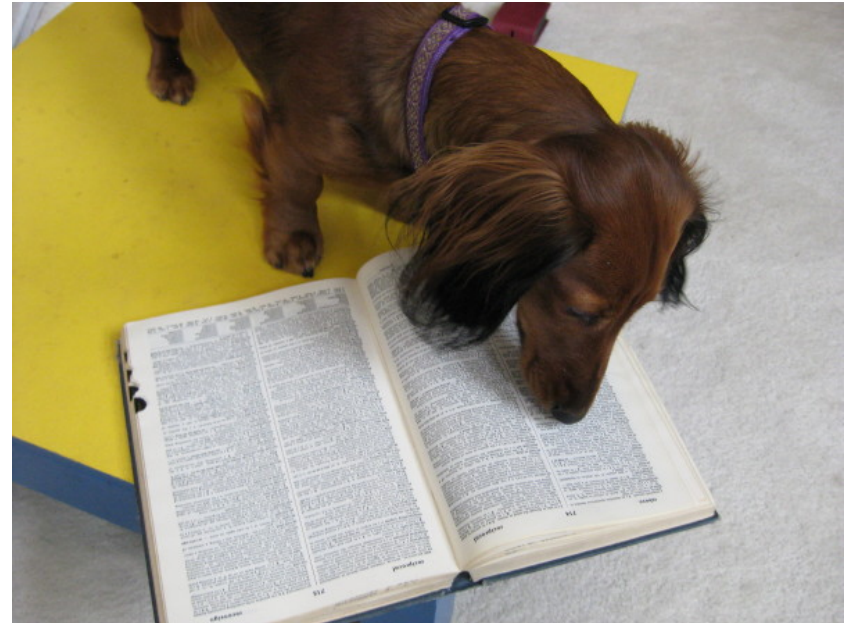
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Dictionary Definition 'Recipe'

2: a set of instructions for making something (as a food dish) from various ingredients

A recipe could be:

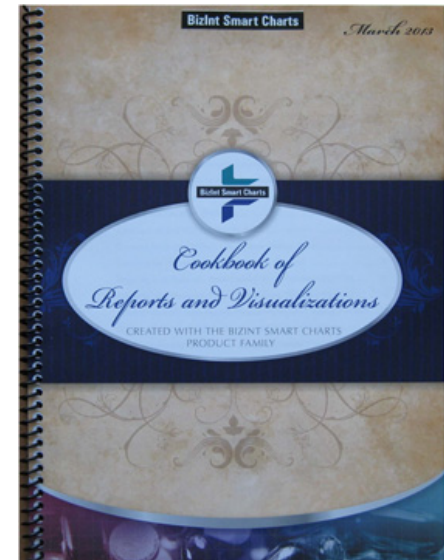
- script
- best practice
- pattern
- inspiration



“Cookbook” of techniques



- The **Cookbook** contains a collection of recipes to help you create accurate and appealing reports and visualizations.
- **Step-by-step recipes** illustrate how each tool in the BizInt Smart Charts family can be used.



A recipe for summarizing sequences

	Title	Database	Patent Family			Sequence Locations				
			Patent	Kind	Date	Sequence	% Identity	Length	Location	
		3.1 FAMPAT			3.1 FAMPAT					
4.	Primers for synthesizing full length cDNA clones and their use	4.1 FAMPAT	EP 1130094	A2	20010905	EP1396543-3966	91.46	2073	Example 1; SEQ ID NO 3966; 1340pp; English.	4.3
		4.2 FAMPAT	EP 1130094	A3	20011121	EP1130094-3966	91.46	2073	Claim 8; SEQ ID NO 3966; 1380pp + Sequence Listing; English.	4.4
		4.3 GENESEQ link	JP 2002017375	A	20020122					
		4.4 GENESEQ link				EP1396543-3967	88.37	129	Example 1; SEQ ID NO 3967; 1340pp; English.	4.5
		4.5 GENESEQ link				EP1130094-3967	88.37	129	Claim 8; SEQ ID NO 3967; 1380pp + Sequence Listing; English.	4.6
		4.6 GENESEQ link				EP1396543-3967	88.37	129	probable disclosure (not found by automated parsing)	4.7
		4.7 GPATPRT link				JP2002017375-4383	88.37	129	TBD (information not in GQ-Pat)	4.8
		4.8 GPATPRT link				JP2002017375-3283	91.46	2073	TBD (information not in GQ-Pat)	4.9
		4.9 GPATNUC link				EP1396543-3966	91.46	2073	probable disclosure (not found by automated parsing)	4.10
		4.10 GPATNUC link								
		4.1 FAMPAT			4.1 FAMPAT					
5.	Thyroid fine needle aspiration molecular assay	5.1 FAMPAT	WO 2006127537	A2	20061130	US20070037186-0081	99.81	2073	claim: 36; 38	5.2
		5.2 GPATNUC link	CA 2609214	A1	20061130	JP2008545400-0081	99.81	2073	TBD (information not in GQ-Pat)	5.3
		5.3 GPATNUC link	US 20070037186	A1	20070215	EP1888785-0081	99.81	2073	TBD (information not in GQ-Pat)	5.4
		5.4 GPATNUC link	EP 1888785	A2	20080220					
			MX 2007014618	A	20080422					
			JP 2008545400	A	20081218					
			WO 2006127537	A3	20090416					
			CN 101501214	A	20090805					
			EP 1888785	A4	20100203					
			BR 200610012	A2	20100518					
		5.1 FAMPAT			5.1 FAMPAT					

...used to summarize Legal Status

Title	Patent Family			Patent Assignee	International Patent Class	Family Legal Status		
	Patent	Kind	Date			Patent Number	Latest Legal Status	
1. Identification and use of antiviral compounds	AU 199526416	A1	1995-12-18	MOUNT SINAI MEDICAL CENTER	G01N33/566 A61K38/00 A61P31/12 C07K14/47 C12N1/21 C12N15/09 C12P21/02 C12Q1/70 C12R1/19 G01N33/50 G01N33/569	AU 199526416 A1	1.1	
	AU 200067713	A5	2001-03-05			AU 200067713 A5	20020502: - (MK6) APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	1.2
	CA 2190587	AA	1995-11-30			CA 2190587 AA	20060519: - (FZDE) DEAD	1.3
	EP 0760014	A1	1997-03-05			EP 0760014 A1	20080813: - (18D) DEEMED TO BE WITHDRAWN (EFFECTIVE DATE : 20080123)	1.4
	EP 0760014	A4	2004-10-27			EP 0760014 A4		1.5
	JP 10500575	T2	1998-01-20			JP 10500575 T2		1.6
	JP 10500575	T2	1998-01-20			JP 10500575 T2		1.7
	KR 19970703433 A	A	1997-07-03			KR 19970703433 A		1.8
	US 2003232325	A	2003-12-18			US 2003232325 A		1.9
	US 2005191703	A	2005-09-01			US 2005191703 A		1.10
	US 5750394	A	1998-05-12			US 5750394 A	20091014: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 12)	1.11
	US 6503703	BA	2003-01-07			US 6503703 BA	20100818: (AS) ASSIGNMENT (OWNER NAME : NATIONAL INSTITUTES OF HEALTH (NIH), U.S. DEPT. OF DESCRIPTION : CONFIRMATORY LICENSE; ASSIGNOR:MOUNT SINAI MEDICAL CENTER; REEL/FRAME:024852/0212 EFFECTIVE DATE : 20020126)	1.12
	US 6890710	BA	2005-05-10			US 6890710 BA	20121107: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 8)	1.13
	US 7498424	B	2009-03-03			US 7498424 B	20120830: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)	1.14
	US 7632801	B	2009-12-15			US 7632801 B	20100831: (CC) CERTIFICATE OF CORRECTION	1.15
	WO 0111335	A2	2001-02-15			WO 0111335 A2		1.16
	WO 0111335	A3	2005-03-10			WO 0111335 A3	20040514: (NENP) NON-ENTRY INTO THE NATIONAL PHASE IN: (1.17
	WO 0111335	C2	2002-07-11					
	WO 9532310	A1	1995-11-30					





Method

Summarize legal status

- Use the base recipe for **Summarize Sequence Results**
- Substitute publication level data including legal status
- Create subtable of Publication Number and Latest Legal Status

... but what about those blanks?

Title	Patent Family			Patent Assignee	International Patent Class	Family Legal Status	
	Patent	Kind	Date			Patent Number	Latest Legal Status
1. Identification and use of antiviral compounds	AU 199526416	A1	1995-12-18	MOUNT SINAI MEDICAL CENTER	G01N33/566 A61K38/00 A61P31/12 C07K14/47 C12N1/21 C12N15/09 C12P21/02 C12Q1/70 C12R1/19 G01N33/50 G01N33/569	AU 199526416 A1	
	AU 200067713	A5	2001-03-05			AU 200067713 A5	20020502: - (MK6) APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE
	CA 2190587	AA	1995-11-30			CA 2190587 AA	20060519: - (FZDE) DEAD
	EP 0760014	A1	1997-03-05			EP 0760014 A1	20080813: - (18D) DEEMED TO BE WITHDRAWN (EFFECTIVE DATE : 20080123)
	EP 0760014	A4	2004-10-27			EP 0760014 A4	
	JP 10500575	T2	1998-01-20			JP 10500575 T2	
	JP 10500575	T2	1998-01-20			JP 10500575 T2	
	KR 19970703433 A	A	1997-07-03			KR 19970703433 A	
	US 2003232325	A	2003-12-18			US 2003232325 A	
	US 2005191703	A	2005-09-01			US 2005191703 A	
	US 5750394	A	1998-05-12			US 5750394 A	20091014: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 12)
	US 6503703	BA	2003-01-07			US 6503703 BA	20100818: (AS) ASSIGNMENT (OWNER NAME : NATIONAL INSTITUTES OF HEALTH (NIH), U.S. DEPT. OF DESCRIPTION : CONFIRMATORY LICENSE; ASSIGNOR:MOUNT SINAI MEDICAL CENTER; REEL/FRAME:024852/0212 EFFECTIVE DATE : 20020126)
	US 6890710	BA	2005-05-10			US 6890710 BA	20121107: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 8)
	US 7498424	B	2009-03-03			US 7498424 B	20120830: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)
	US 7632801	B	2009-12-15			US 7632801 B	20100831: (CC) CERTIFICATE OF CORRECTION
	WO 0111335	A2	2001-02-15			WO 0111335 A2	
	WO 0111335	A3	2005-03-10			WO 0111335 A3	20040514: (NENP) NON-ENTRY INTO THE NATIONAL PHASE IN: (
	WO 0111335	C2	2002-07-11				
	WO 9532310	A1	1995-11-30				

Variation – removing empty values

Title	Patent Family			Patent Assignee	International Patent Class	Family Legal Status				
	Patent	Kind	Date			Pub Number	Latest Legal Status			
1. IDENTIFICATION AND USE OF ANTIVIRAL COMPOUNDS IDENTIFICATION ET UTILISATION DE COMPOSES ANTIVIRAUX	WO 9532310	A1	1995-11-30	MOUNT SINAI MEDICAL CENTER	G01N33/566	WO 9532310 A1	19970305: + (WWP) WIPO INFORMATION: PUBLISHED IN NATIONAL OFFICE (REF DOCUMENT NUMBER : 1995921305 COUNTRY OF REF DOCUMENT : EP)	1.1		
	AU 199526416	A1			A61K38/00		AU 200067713 A5	20020502: - (MK6) APPLICATION LAPSED SECTION 142(2)(F)/REG. 8.3(3) - PCT APPLIC. NOT ENTERING NATIONAL PHASE	1.2	
	AU 200067713	A5			A61P31/12					
	CA 2190587	AA			C07K14/47					
	EP 0760014	A1			C12N1/21					
	EP 0760014	A4			C12N15/09					
	JP 10500575	T2			C12P21/02					
	KR 19970703433	A			C12Q1/70					
	US 2003232325	A			C12R1/19					
	US 2005191703	A			G01N33/50					
	US 5750394	A			G01N33/569					
	US 6503703	BA								
	US 6890710	BA								
	US 7498424	B								
	US 7632801	B								
	WO 0111335	A2								
	WO 0111335	A3								
	WO 0111335	C2								
	WO 9532310	A1								
									WO 0111335 A3	20040514: (NENP) NON-ENTRY INTO THE NATIONAL PHASE IN: (REF COUNTRY CODE : JP)
						JP 10500575 T2	20060110: - (A02) DECISION OF REFUSAL (DESCRIPTION : JAPANESE INTERMEDIATE CODE: A02 EFFECTIVE DATE : 20060110)	1.4		
						CA 2190587 AA	20060519: - (FZDE) DEAD	1.5		
						EP 0760014 A1	20080813: - (18D) DEEMED TO BE WITHDRAWN (EFFECTIVE DATE : 20080123)	1.6		
						US 5750394 A	20091014: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 12)	1.7		
						US 6503703 BA	20100818: (AS) ASSIGNMENT (OWNER NAME : NATIONAL INSTITUTES OF HEALTH (NIH), U.S. DEPT. OF DESCRIPTION : CONFIRMATORY LICENSE; ASSIGNOR:MOUNT SINAI MEDICAL CENTER; REEL/FRAME:024852/0212 EFFECTIVE DATE : 20020126)	1.8		
						US 7498424 B	20120830: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)	1.9		
						US 6890710 BA	20121107: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 8)	1.10		
						US 7632801 B	20130515: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)	1.11		

Method

Summarize legal status
(where values are present)



Before sending to Reference Rows:

- Sort table in BizInt Smart Charts on Latest Legal Status
- Hide all rows with blank values

Variation – only US publications

Title	Patent Family			Patent Assignee	International Patent Class	Family Legal Status:US	
	Patent	Kind	Date			Pub Number	Latest Legal Status
IDENTIFICATION AND USE OF ANTIVIRAL COMPOUNDS IDENTIFICATION ET UTILISATION DE COMPOSES ANTIVIRAUX	WO 9532310	A1	1995-11-30	MOUNT SINAI MEDICAL CENTER	G01N33/566	US 5750394 A	20091014: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 12)
	AU 199526416	A1			A61K38/00		
	AU 200067713	A5			A61P31/12	US 6503703 BA	20100818: (AS) ASSIGNMENT (OWNER NAME : NATIONAL INSTITUTES OF HEALTH (NIH), U.S. DEPT. OF DESCRIPTION : CONFIRMATORY LICENSE; ASSIGNOR:MOUNT SINAI MEDICAL CENTER; REEL/FRAME:024852/0212 EFFECTIVE DATE : 20020126)
	CA 2190587	AA			C07K14/47		
	EP 0760014	A1			C12N1/21		
	EP 0760014	A4			C12N15/09		
	JP 10500575	T2			C12P21/02		
	KR 19970703433	A			C12Q1/70	US 6890710 BA	20121107: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 8)
	US 2003232325	A			C12R1/19		
	US 2005191703	A			G01N33/50	US 7498424 B	20120830: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)
	US 5750394	A			G01N33/569		
	US 6503703	BA				US 7632801 B	20130515: + (FPAY) FEE PAYMENT (YEAR OF FEE PAYMENT : 4)
	US 6890710	BA					
	US 7498424	B					
	US 7632801	B					
	WO 0111335	A2					
WO 0111335	A3						
WO 0111335	C2						
WO 9532310	A1						
	1.1 Patbase		1.1 Patbase	1.1 Patbase	1.1 Patbase		1.1 Patbase
Guanosine triphosphate-binding protein coupled receptors, genes thereof and production and use of the same	WO 0109346	A1	2001-02-08	NISHIKAWA TETSUO IHARA SHIGEO NAGAI KEIICHI SUGIYAMA TOMOYASU OTSUKI TETSUJI ISHII SHIZUKO HELIX RES INST SAITO KAORU NAKAE HIROKI OTA TOSHIO YAMAMOTO JUN ICHI WAKAMATSU	A61K38/00	US 2003017480 A	20030523: (AS) ASSIGNMENT (OWNER NAME : CHUGAI SEIYAKU KABUSHIKI KAISHA, JAPAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HELIX RESEARCH INSTITUTE; REEL/FRAME:014094/0415 EFFECTIVE DATE : 20021111)
	AU 200061808	A5			A61P3/00		
	AU 200061809	A5			A61P3/10	US 2003082776 A	20030523: (AS) ASSIGNMENT (OWNER NAME : CHUGAI SEIYAKU KABUSHIKI KAISHA, JAPAN DESCRIPTION : ASSIGNMENT OF ASSIGNORS INTEREST; ASSIGNOR:HELIX RESEARCH INSTITUTE; REEL/FRAME:014095/0757 EFFECTIVE DATE : 20021111)
	AU 200061810	A5			A61P21/00		
	AU 200061811	A5			A61P25/00		
	AU 200061812	A5			A61P43/00		
	AU 200061813	A5			C07K14/47		
	AU 200061814	A5			C12N1/15		
	AU 200061815	A5			C12N1/19		
	AU 200061816	A5			C12N1/21		
	AU 200063158	A5			C12N15/12		
					C12N15/54		



Method

Summarize filtered legal status

- Instead of exporting to HTML, export to VP-SCE
- Continue with the base recipe for **Filtering Patent Families by Authority**
- Find by country, state, or other text elements (": -") in the legal status
- Rename sub-fields before exporting

When should you write a recipe?

- When you need to share a process
- When a process gets complicated
- After a major improvement
- When you have so much marginalia that you can barely read the page
- When new ingredients need drastically different handling
- To clarify the order of steps

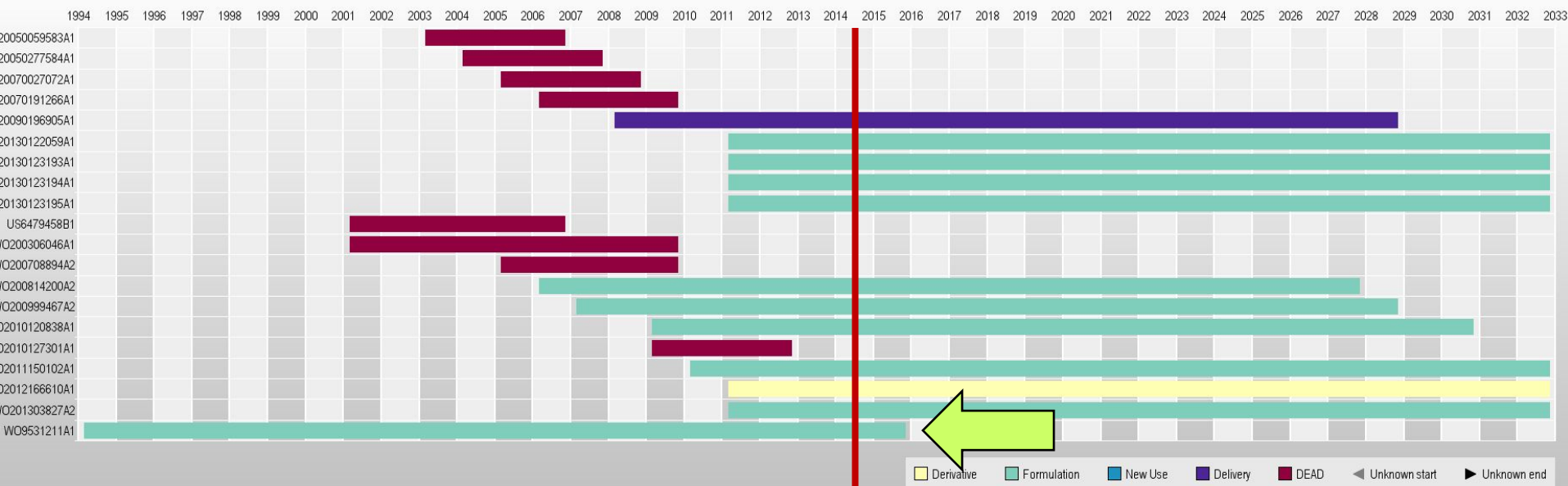
A better grilled cheese



<http://smittenkitchen.com/blog/2013/10/frico-grilled-cheese-sandwiches/>

Visualize patent cliff for a drug

Restasis Patent Landscape



Method

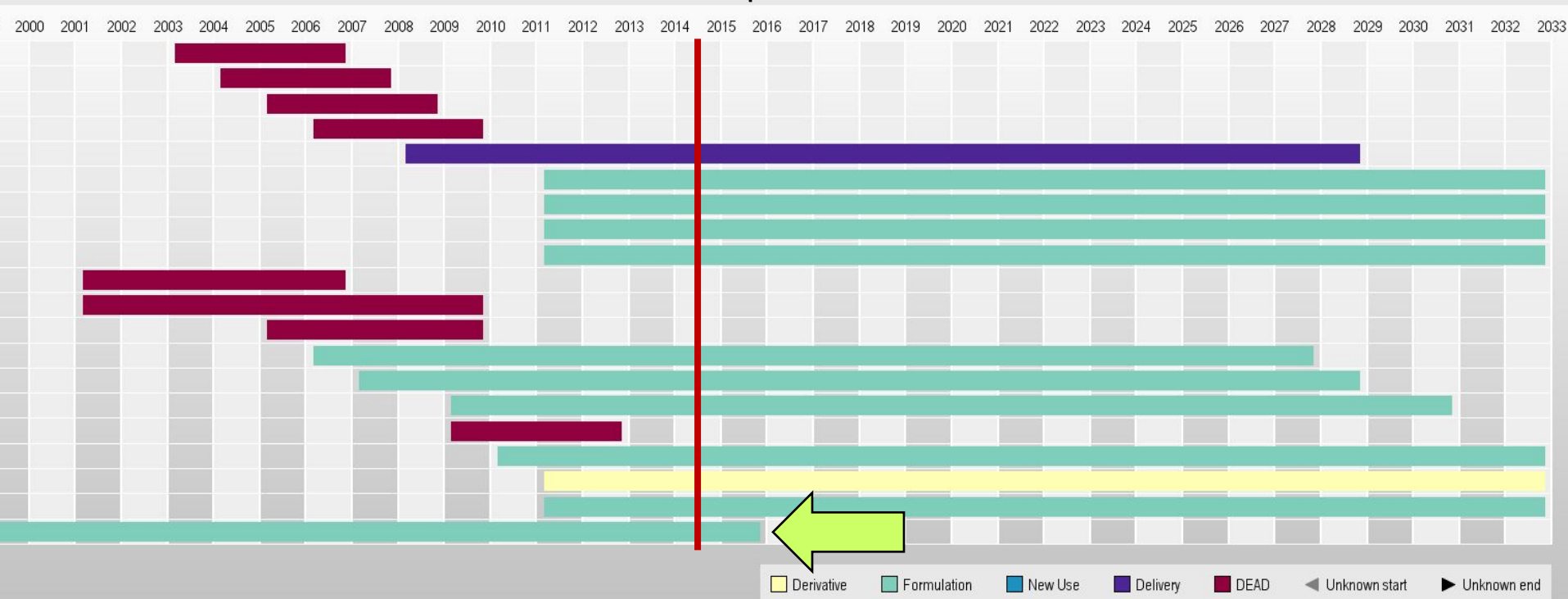
Visualize patent cliff for a drug



- Combine Cortellis Patents (drug info) with Orbit data (legal status, exp date)
- Reference Rows to stitch data together
- Use [Creating Clinical Trials Timeline](#) recipe to build timeline graphic
- Categorize based on state + type

Visualize patent cliff for a drug

Restasis Patent Landscape



Writing your own recipes

- Any process (search, report, etc.) can be written as a recipe
- You don't have to start from scratch
- Put common procedures into their own recipes
- Format doesn't matter
- Don't be afraid to revise when your tools or ingredients change



Software for
Business Intelligence

BizInt Smart Charts

Thank you

These slides available at
bizint.com/slides
Cookbook available at
bizint.com/cookbook

Mentioned Cookbooks



Julia Child – **Mastering the Art of French Cooking, Volume 1**

Julia Child and Jacques Pepin – **Julia and Jacques Cooking at Home**

Alton Brown – **I'm Just Here for the Food**

Deb Perelman – **The Smitten Kitchen Cookbook**