Software for
Business Intelligence

BizInt Smart Charts

Using Color Coding in BizInt Smart Charts for Patents

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THE JOURNEY CONTINUES

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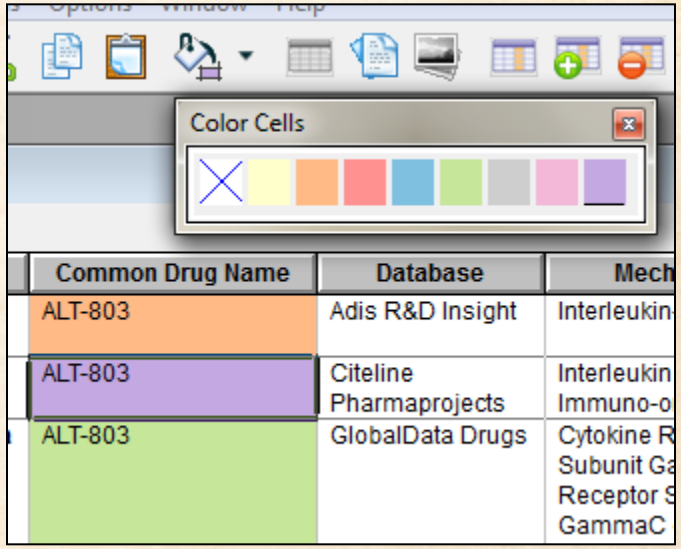
Color Coding Cells

- The old “Highlight Cell” feature is now “Color Code Cells”
- Color chooser to directly select a color (or clear)
- “Color Code Cell” toggles the selection to the color or clear (same behavior with the button)
- Color Codes survive Combine Charts operation color of the “key” chart is retained

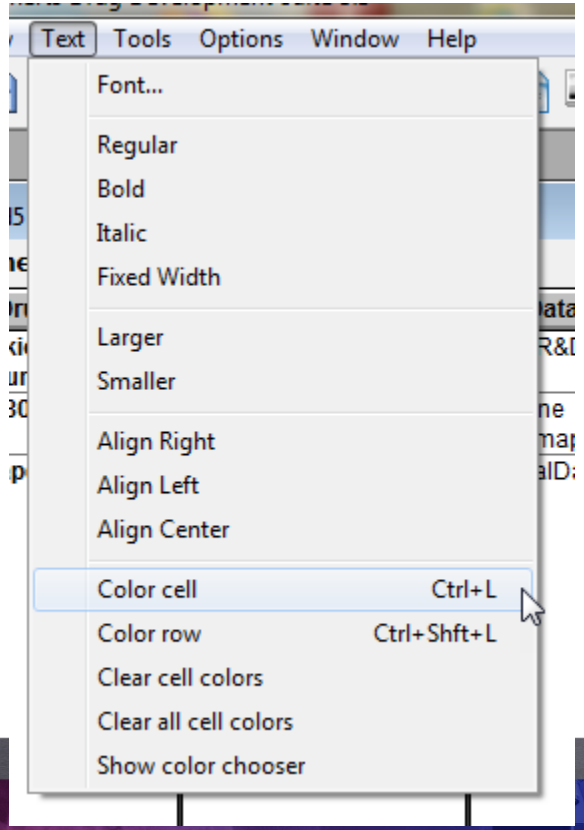


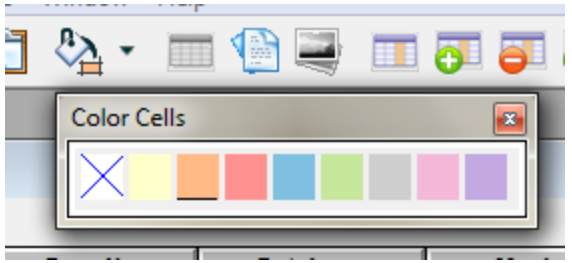
Color Coding Cells

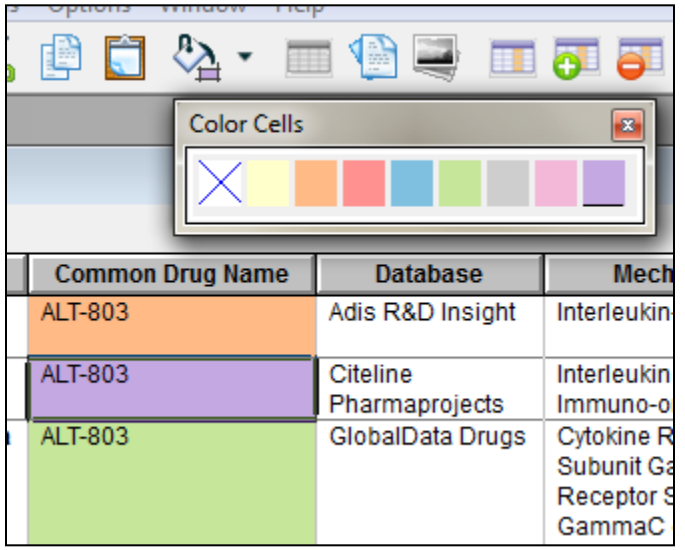
Software for Business Intelligence

BizInt Smart Charts

- Choice of eight colors for color coding added in Version 5.5







Color Coding Cells

BizInt Smart Charts

for Patents

- Use color coding in user-added columns when combining charts

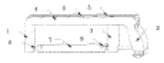
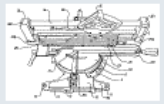
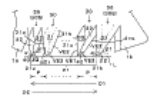
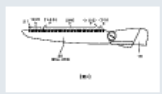
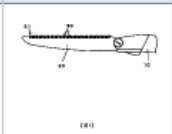
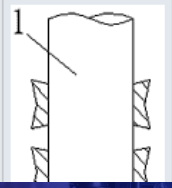
D:\buff\feature_a.chp

PatBase: Feature A Search

	Patent Number	Patent Date	
1	CN112496450A	2021-03-16	A disassembl saw blade (M
2	US10610939B	2020-04-07	DUSTLESS OI CUT-THROUGI
3	JP6598281B1	2019-10-30	HAND SAW
4	TWM566122Y	2018-09-01	HAND SAW
5	TWM549122Y	2017-09-21	HAND SAW
6	CN106956036A	2017-07-18	PORTABLE FI SAW DEVICE

Unsaved9

PatBase: Feature A+B Search

	Patent Number	Patent Date	Title	Image	International Patent Class	Patent Assignee	Feature A	Feature B
1	CN112496450A	2021-03-16	A disassembly convenient hand saw blade (Machine translation)		B23D49/12 B23D51/10 B23D51/12	ZHEJIANG LUCHENG TOO MACHINERY CO LTD	Not applied	
2	US10610939B	2020-04-07	DUSTLESS ONE-STROKE CUT-THROUGH SAW		B23D49/00 B23D49/10 B23D51/01 B23D51/04 B27G5/02	CLEAN CUTTERS LLC		
3	JP6598281B1	2019-10-30	HAND SAW		B23D49/10 B23D49/12 B23D49/14 B23D61/12 B27B21/00 B27B21/04 B27B33/10	U M KOGYO INC		
4	TWM566122Y	2018-09-01	HAND SAW		B23D49/12	U M KOGYO INC	Uses similar approach	
5	TWM549122Y	2017-09-21	HAND SAW		B23D49/10	U M KOGYO INC		
6	CN106956036A	2017-07-18	PORTABLE FIBER ROPE HAND SAW DEVICE		B23D57/00	JIANGSU WENFENG CHEMICAL FIBER GROUP CO LTD		

Patent Assignee	Feature B
CLEAN CUTTERS LLC	
U M KOGYO INC	
U M KOGYO INC	
PAN DEMIAO	See claim 3
KANG JIANPING	Possibly too specific
ZHAO CHUNYUN	

Color Coding Cells - Caveats

- Color codes in publisher columns are lost if a record is updated with new data – **Color Code User-added Columns!**
- We have not defined what happens in case of conflicts.
- If there is a conflict in color coding during update or combine, the color will follow from the selected cell only
- In Reference Rows, color coding will come from the selected cell only (nothing from Summarize rules)
  – Best to rely on the “Fill in the blanks” behavior

Motivation - FTO

- Customer builds FTO reports in BizInt
- Exports to Excel in order to color code cells
- **Update** the report … color codes are lost

Motivation - FTO

- Preparing an example for an FTO training class
- Class emphasizes searching on key features at various levels of specificity and reviewing results of each feature / level before **combining**
- Searches may use different databases or platforms

Using Color Coding in FTO Search Reports

- Example of the color coding process only
- Search is bogus
- Annotations are bogus

- “hand saw” with feature A and feature B for sale in the US

Color Coding in FTO – Feature A

- Search for feature A
- Create chart, add column for feature A, review, color code

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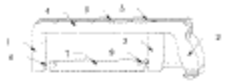
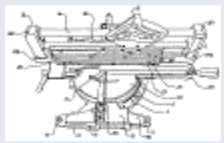
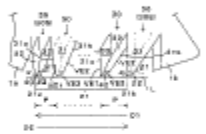
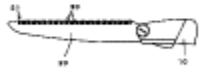
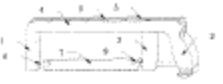
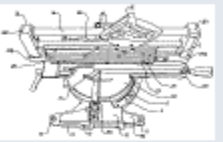
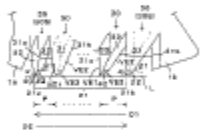
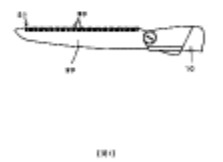
PatBase: Feature A Search

	Patent Number	Patent Date	Title	Image	International Patent Class	Patent Assignee	Feature A
1	CN112496450A	2021-03-16	A disassembly convenient hand saw blade (Machine translation)		B23D49/12 B23D51/10 B23D51/12	ZHEJIANG LUCHENG TOO MACHINERY CO LTD	Not applied
2	US10610939B	2020-04-07	DUSTLESS ONE-STROKE CUT-THROUGH SAW		B23D49/00 B23D49/10 B23D51/01 B23D51/04 B27G5/02	CLEAN CUTTERS LLC	
3	JP6598281B1	2019-10-30	HAND SAW		B23D49/10 B23D49/12 B23D49/14 B23D61/12 B27B21/00 B27B21/04 B27B33/10	U M KOGYO INC	
4	TWM566122Y	2018-09-01	HAND SAW		B23D49/12	U M KOGYO INC	Uses similar approach
5	TWM549122Y	2017-09-21	HAND SAW		B23D49/10	U M KOGYO INC	

Color Coding in FTO – Notes

Image	International Patent Class	Patent Assignee	Feature A
	B23D49/12 B23D51/10 B23D51/12	ZHEJIANG LUCHENG TOO MACHINERY CO LTD	Not applied
	B23D49/00 B23D49/10 B23D51/01 B23D51/04 B27G5/02	CLEAN CUTTERS LLC	
	B23D49/10 B23D49/12 B23D49/14 B23D61/12 B27B21/00 B27B21/04 B27B33/10	U M KOGYO INC	
	B23D49/12	U M KOGYO INC	Uses similar approach
	B23D49/10	U M KOGYO INC	
	B23D57/00	JIANGSU WENFENG CHEMICAL FIBER GROUP CO LTD	

- You don't have to enter text annotations in order to color code a cell
- Colors look slightly different on "grey" rows (this does not carry over to exports)

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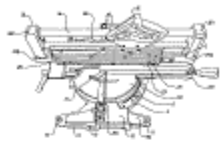
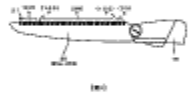
Color Coding in FTO – Feature B

- Repeat process for Feature B
  (or alternate search strategies for A…)

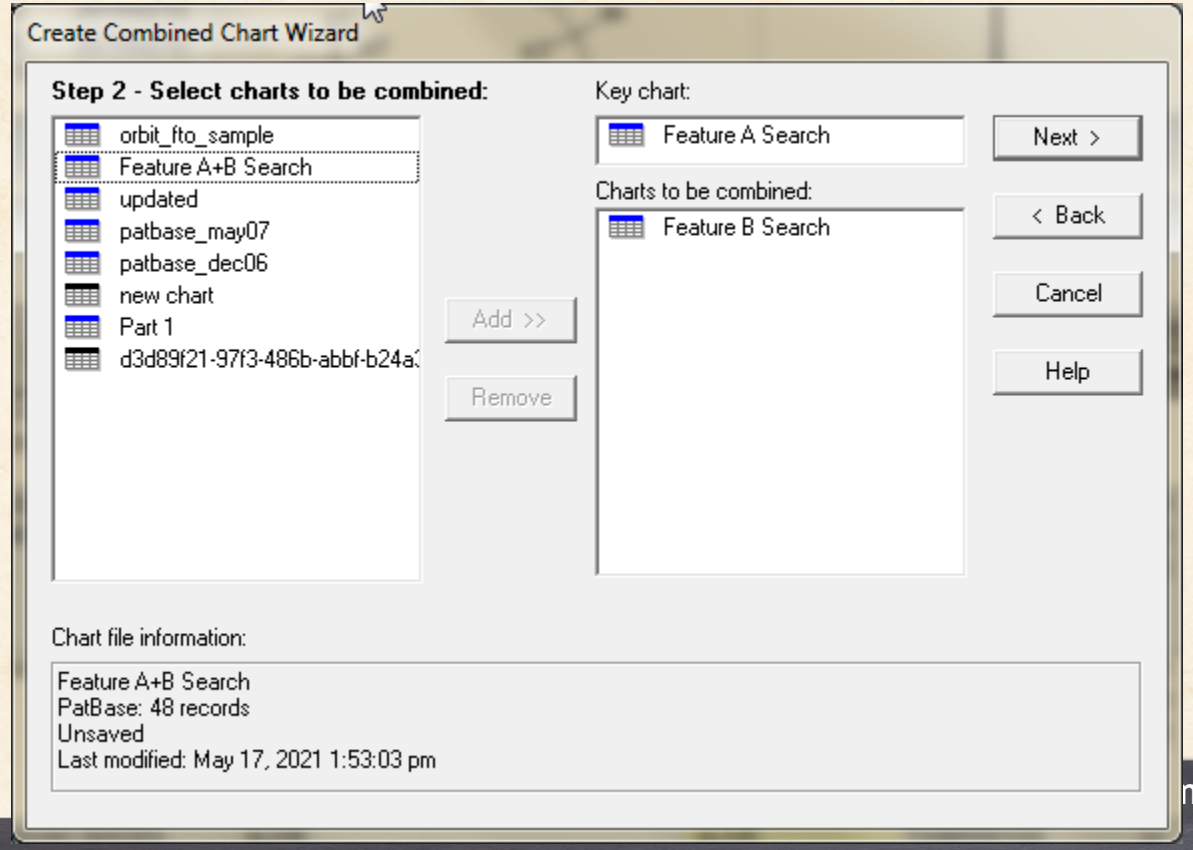
D:\buff\feature_b.chp

PatBase: Feature B Search

	Patent Number	Patent Date	Title	Image	International Patent Class	Patent Assignee	Feature B
1	US10610939B	2020-04-07	DUSTLESS ONE-STROKE CUT-THROUGH SAW		B23D49/00 B23D49/10 B23D51/01 B23D51/04 B27G5/02	CLEAN CUTTERS LLC	
2	JP6598281B1	2019-10-30	HAND SAW		B23D49/10 B23D49/12 B23D49/14 B23D61/12 B27B21/00 B27B21/04 B27B33/10	U M KOGYO INC	
3	TWM566122Y	2018-09-01	HAND SAW		B23D49/12	U M KOGYO INC	
4	CN204206819U	2015-03-18	HAND SAW		A01G3/08	PAN DEMIAO	See claim 3
5	CN204195780U	2015-03-11	DUAL-PURPOSE HAND TOOL		B26B1/02 B26B11/00 B26B9/00	KANG JIANPING	Possibly too specific

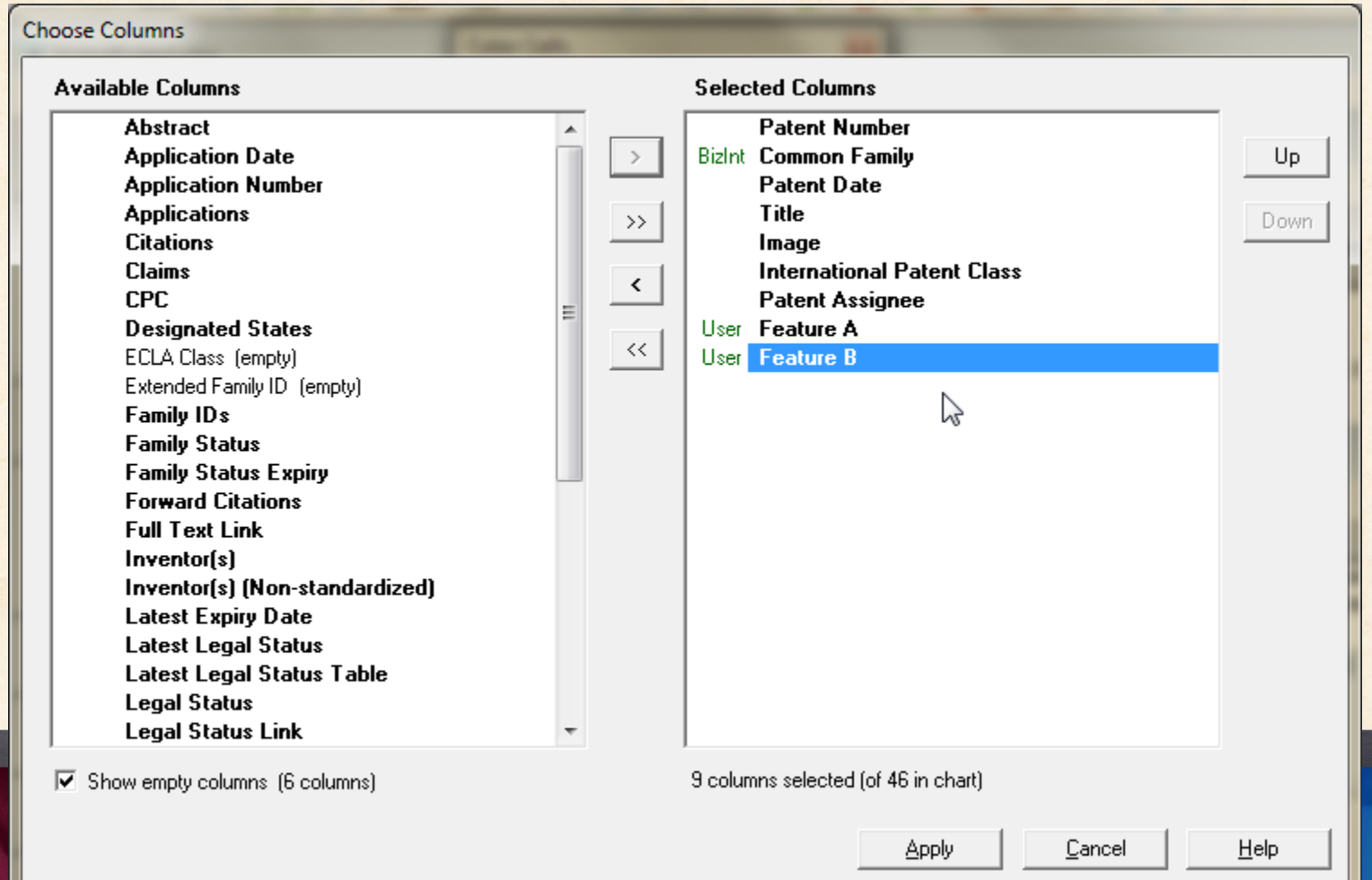
Color Coding in FTO – Combine All Feature Charts

- Combine all charts for the various feature sets



Color Coding in FTO – Combine All Feature Charts

- Make all feature columns visible (Choose Columns)

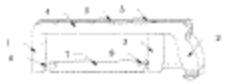
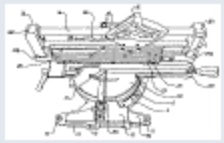
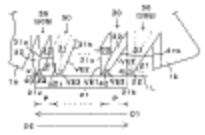
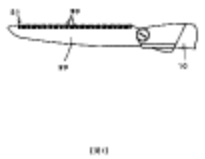


Color Coding in FTO – Review All Features

- Can review “blanks” – e.g. Row 1 did not hit feature B

Unsaved9

PatBase: Feature A+B Search

	Patent Number	Patent Date	Title	Image	International Patent Class	Patent Assignee	Feature A	Feature B
1	CN112496450A	2021-03-16	A disassembly convenient hand saw blade (Machine translation)		B23D49/12 B23D51/10 B23D51/12	ZHEJIANG LUCHENG TOO MACHINERY CO LTD	Not applied	
2	US10610939B	2020-04-07	DUSTLESS ONE-STROKE CUT-THROUGH SAW		B23D49/00 B23D49/10 B23D51/01 B23D51/04 B27G5/02	CLEAN CUTTERS LLC		
3	JP6598281B1	2019-10-30	HAND SAW		B23D49/10 B23D49/12 B23D49/14 B23D61/12 B27B21/00 B27B21/04 B27B33/10	U M KOGYO INC		
4	TWM566122Y	2018-09-01	HAND SAW		B23D49/12	U M KOGYO INC	Uses similar approach	
5	TWM549122Y	2017-09-21	HAND SAW		B23D49/10	U M KOGYO INC		

Color Coding in FTO – Another Data Source

- Bogus search warning:
  transfer publication numbers to another platform

FAMPAT: orbit_fto_sample

	Title	Inventor(s)	State	Geography	State (Copy)	FTO Family			
						Pub No.	Kind	Pub Date	Status
1	Convenient manual saw of dismouting saw blade	CHEN PENGFEI CHEN SHUGEN	ALIVE		ALIVE	CN112496450	A	2021-03-16	PENDING
2	Dustless one-stroke cut-through saw	PRUSAKOV DMITRY KLIMCHUK IGOR	ALIVE		ALIVE	US10610939 US20200230719 US20200230720	B1 A1 A1	2020-04-07 2020-07-23 2020-07-23	GRANTED PENDING PENDING
3	Hand saw	MIYAWAKI, Shozo	ALIVE	WO	ALIVE	WO2020202463 JP6598281 JP2020202463W TW202037433	A1 B1 A1 A	2020-10-08 2019-10-30 2021-04-30 2020-10-16	PENDING GRANTED PENDING
4	Hand saw	MIYAWAKI SHOZO	ALIVE		ALIVE	TWM566122	U	2018-09-01	GRANTED
5	Hand saw	MIYAWAKI, SHOZO	ALIVE		ALIVE	TWM549122	U	2017-09-21	GRANTED
6	Portable fiber rope hand saw device	LIU RONG GONG JIANBING	DEAD		DEAD	CN106956036	A	2017-07-18	LAPSED
7	Hand saw	PAN DEMIAO	ALIVE		ALIVE	CN204206819U	U	2015-03-18	GRANTED

Color Coding in FTO – Notes

Inventor(s)	State	Geography	State (Copy)	FTO Family			
				Pub No.	Kind	Pub Date	Status
CHEN PENGFEI CHEN SHUGEN	ALIVE		ALIVE	CN112496450	A	2021-03-16	PENDING
PRUSAKOV DMITRY KLIMCHUK IGOR	ALIVE		ALIVE	US10610939	B1	2020-04-07	GRANTED
				US20200230719	A1	2020-07-23	PENDING
				US20200230720	A1	2020-07-23	PENDING
MIYAWAKI, Shozo	ALIVE	WO	ALIVE	WO2020202463	A1	2020-10-08	PENDING
				JP6598281	B1	2019-10-30	GRANTED
				JP2020202463W	A1	2021-04-30	
				TW202037433	A	2020-10-16	PENDING
MIYAWAKI SHOZO	ALIVE		ALIVE	TWM566122	U	2018-09-01	GRANTED
MIYAWAKI, SHOZO	ALIVE		ALIVE	TWM549122	U	2017-09-21	GRANTED
LIU RONG GONG JIANBING	DEAD		DEAD	CN106956036	A	2017-07-18	LAPSED
PAN DEMIAO	ALIVE		ALIVE	CN204206819U	U	2015-03-18	GRANTED
KANG JIANPING	DEAD		DEAD	CN204195780U	U	2015-03-11	LAPSED
ZHAO CHUNYUN	DEAD		DEAD	CN204120386U	U	2015-01-28	LAPSED

- Copied “State” column before color coding

Color Coding in FTO – Combine Different Sources

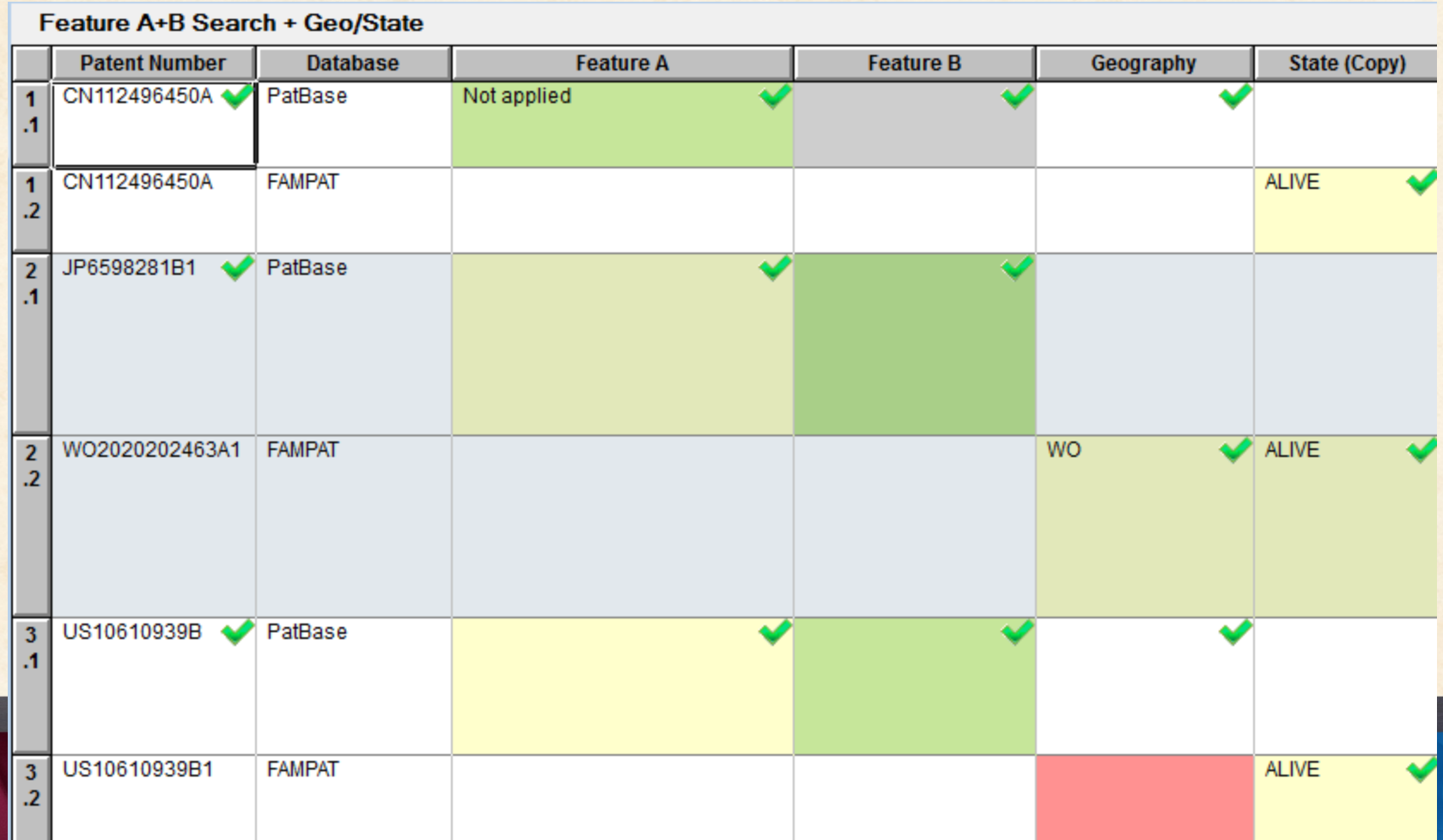
- Color codes remain with the record they were applied to

Feature A+B Search + Geo/State

	Patent Number	Database	Feature A	Feature B	Geography	State (Copy)
1	CN112496450A	FAMPAT				ALIVE
2	CN112496450A	PatBase	Not applied			
3	WO2020202463A1	FAMPAT			WO	ALIVE
4	US10610939B1	FAMPAT				ALIVE
5	US10610939B	PatBase				
6	JP6598281B1	PatBase				

Color Coding in FTO – Reference Rows!

- Default rule links annotations from different charts



Feature A+B Search + Geo/State

	Patent Number	Database	Feature A	Feature B	Geography	State (Copy)
1.1	CN112496450A	PatBase	Not applied			
1.2	CN112496450A	FAMPAT				ALIVE
2.1	JP6598281B1	PatBase				
2.2	WO2020202463A1	FAMPAT			WO	ALIVE
3.1	US10610939B	PatBase				
3.2	US10610939B1	FAMPAT				ALIVE

Color Coding in FTO – Reference Rows!

- Export to see linked data

PatBase	FAMPAT	Feature A	Feature B	Geography	State (Copy)
1.1 Patbase 83860088	1.2 FAM 93134820	Not applied {1.1 Patbase}			ALIVE {1.2 FAM}
2.1 Patbase 76436297	2.2 FAM 86465975				
3.1 Patbase 7828185					ALIVE {3.2 FAM}
	4.1 FAM 82471819 4.2 FAM 77318941				ALIVE {4.1 FAM}
5.1 Patbase 70982793 5.2 Patbase 67052470		Uses similar approach {5.1 Patbase}			
6.1 Patbase 66382363	6.2 FAM 76777985				DEAD {6.2 FAM}

BUG: Reference Row … rting colors in blank cells

TIP: If you see something, say something!

Color Coding in FTO – Reference Rows!

- Fixed for next release

PatBase	FAMPAT	Feature A	Feature B	Geography	State (Copy)
1.1 Patbase 83860088	1.2 FAM 93134820	Not applied {1.1 Patbase}			ALIVE {1.2 FAM}
2.1 Patbase 76436297	2.2 FAM 86465975			WO {2.2 FAM}	ALIVE {2.2 FAM}
3.1 Patbase 78281853	3.2 FAM 88095591				ALIVE {3.2 FAM}
	4.1 FAM 82471819 4.2 FAM 77318941				ALIVE {4.1 FAM}
5.1 Patbase 70982793 5.2 Patbase 67052470		Uses similar approach {5.1 Patbase}			
6.1 Patbase 66382363	6.2 FAM 76777985				DEAD {6.2 FAM}
7.1 Patbase 58722639	7.2 FAM 68837627		See claim 3		ALIVE

Software for
Business Intelligence

BizInt Smart Charts

Questions?
Requests?

THE JOURNEY CONTINUES