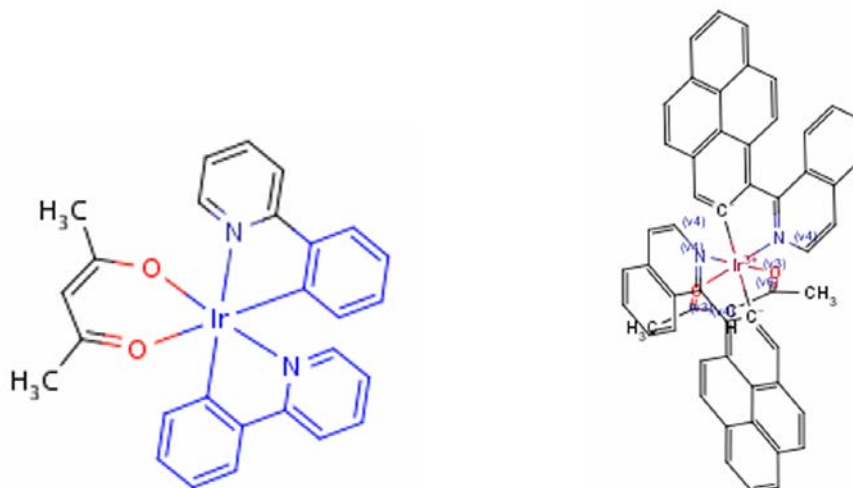


I'm interested in reviewing patents for organoiridium complexes similar to those shown below. I'd like to view the Markush structures from these patents.



Perform a substructure search. Draw a structure query that will retrieve the substances of interest. (Click [here](#) for drawing details). The query features below include: "Any" Bond, Atom List, and Bond Topology. Click the More Options link and check the box for Include Related Markush. Click Search.

The query looks like this:

Search in Reactions Substances Literature

Search as / by

- Product
- Starting material
- Reagent / Catalyst
- Any role
- As Drawn
- Substructure
 - on heteroatoms
 - on all atoms
- Similarity

Options

- Include tautomers
- Ignore stereo
- No salts
- No mixtures
- No isotopes
- No charges
- No radicals
- No additional rings
- Ignore Atom Mappings
- Align results with query
- More options**
 - Include related Markush
 - Keep Fragments

Results:

8989 substances are retrieved. To view the Markush structures in the list, sort by mol. Wt. and then jump to the last page.

8989 substances out of 1942 citations

Substances (Grid) Substances (Table) Citations

Limit to Exclude Output Print Zoom in Zoom out Sort by

- No of References
- Reaxys-RN
- No of Fragments
- Molweight (g/mol)**
- Molecular Formula
- Publication Year
- Comm. Availability
- No of References

1

2

3

racemate

go to Page Page 1 of 999

2

View each page of Markush structures by pressing the Left Arrow.

8989 substances out of 1942 citations

Substances (Grid) Substances (Table) Citations

Limit to Exclude Output Print Zoom in Zoom out Sort by Molweight (g/mol)

3

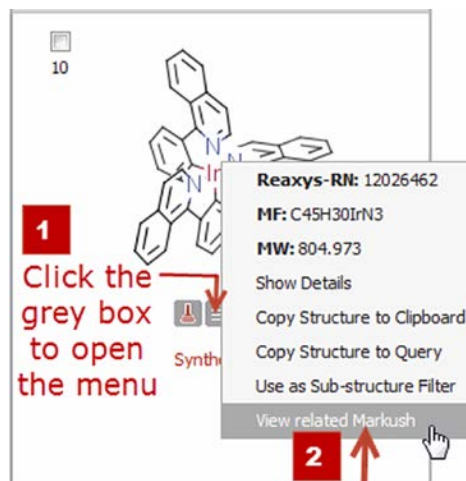
go to Page Page 999 of 999

8983

8984

8985

Note: You can also view the related Markush structures for a single substance in your list. Click the grey box under a structure to open the menu, and then select **View Related Markush**. (Not all substances have related Markush structures).



Below, the 7 Markush structures that are related to your substance of interest are displayed in Grid View.

7 substances out of 5 citations

Substances (Grid) Substances (Table) Citations go to Page Page 1 of 1

Limit to Exclude Output Print Zoom in Zoom out Sort by No of References

1 \$X Identification	2 \$X Identification	3 $\left[\begin{array}{c} \text{H}_3\text{C}-\text{A} \\ \\ \text{M} \quad \quad \text{N}-\text{B} \\ \\ \text{L} \end{array} \right]_n$ Identification
4 $\begin{array}{c} \text{L} \quad \text{M} \quad \text{L} \\ \\ \text{L} \end{array}$ Identification	5 $\begin{array}{c} \text{A} \\ \text{A} \quad \text{M} \quad \text{P} \quad \text{B} \\ \text{A} \quad \text{B} \end{array}$ Identification	6 $\begin{array}{c} \text{B} \quad \text{L} \quad \text{L} \\ \quad \quad \\ \text{L} \quad \text{N} \quad \text{L} \\ \quad \quad \\ \text{A} \quad \text{L} \quad \text{B} \end{array}$ Identification
7 \$X Identification		

In Table View, you can see more details:

▲ Markush Details

Label	Value	Size	Attributes	Substituted by	Frequency
M	metal atom				
B	cyclic group				
A	cyclic group			\$a	0-?
n	3				
\$a	halogen				
	nitro				
	trialkylsilyl group	1-8C			
	alkyl group	1-20C	0-? <\$b>	\$c	0-?
\$b	-O-				
	-S-				
	-CO-				
	-CO-O-				

Title of the Document	Authors	Year	Source
PROCESS FOR PRODUCTION OF ORTHO-METALLIZED 1:3 COMPLEX OF IRIIDIUM WITH HOMOLIGAND	Nippon Steel Chemical Co., Ltd.	2008	Patent: EP1944308 A1, 2008 ; Patent Family: WO2007/32203 A1; EP1944308 A1; US2008/255361 US8034934 B2; Full Text
▼ Title/Abstract ▼ Front page Information ▼ Show All Reactions (2) ▼ Show All Substances (16)			
Synthesis of organometallic cyclometallated transition metal complexes	Eastman Kodak Company	2006	Patent: US2006/223997 A1, 2006 ; Patent Family: US2006/223997 A1; US2006/224007 A1; US7399857 Full Text
▼ Title/Abstract ▼ Front page Information ▼ Show All Reactions (8) ▼ Show All Substances (28)			
SYNTHESIS OF ORGANOMETALLIC CYCLOMETALLATED GROUP VIII B METAL COMPLEXES	Eastman Kodak Company	2005	Patent: US2005/288506 A1, 2005 ; Patent Family: US2005/288506 A1; US7015344 B2; Full Text
▼ Title/Abstract ▼ Front page Information ▼ Show All Reactions (1) ▼ Show All Substances (15)			
SYNTHESIS OF ORGANOMETALLIC CYCLOMETALLATED TRANSITION METAL COMPLEXES	Eastman Kodak Company	2005	Patent: US2005/288507 A1, 2005 ; Patent Family: US2005/288507 A1; WO2006/12023 A1; US7005522 EP1762123 A1; EP1762123 B1; ... Full Text
▼ Title/Abstract ▼ Front page Information ▼ Show All Reactions (7) ▼ Show All Substances (26)			
MICROPOROUS STRUCTURE OF AN ORGANIC METAL COMPLEX	CANON KABUSHIKI KAISHA	2004	Patent: WO2004/60876 A1, 2004 ; Patent Family: WO2004/60876 A1; JP2004/231639 A; US2006/1495 Full Text

In Citations View you see the citation details for these 7 structures. Notice that they are from 5 different patents.

Do you have an idea for a workflow example?

Please contact me:
Christine Flemming
c.flemming@elsevier.com

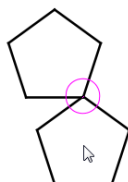
Sept. 30, 2013

Draw the query in MarvinSketch

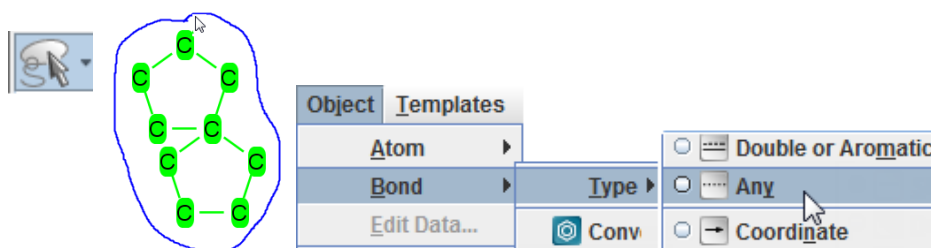
1. Select the 5-membered ring template. Then click in the drawing area.



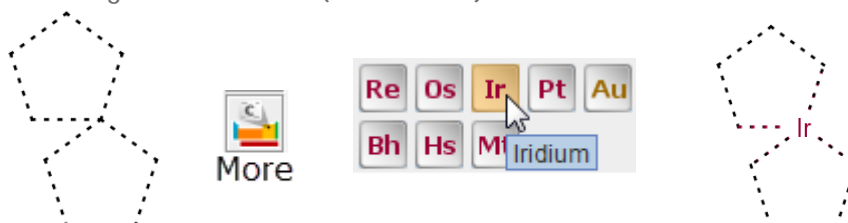
2. The ring tool should still be displayed with your mouse arrow. Point your mouse as shown below and click to attach the second ring



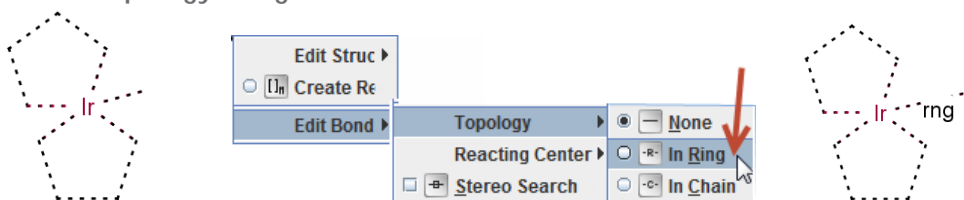
3. Use the Lasso Select tool to encircle the structure. Then select Object>Bond>Type>Any.



4. Add the Iridium atom to the center by clicking the More button and then selecting the Ir button. (Click Close). Then click the center atom.



- Use the Single Bond tool to add a bond to the Ir. Turn this bond into an "Any" Bond (See # 3). Right click the new bond and then select **Edit Bond>Topology>Ring**.



- Create an **Atom List** by clicking the **More** button, clicking the **Atom List** button, and then clicking the "C" and "N" atoms. (Click Close). Then click the appropriate atoms on the structure.

