REUTERS/Fayaz Kabli

ICIC 2012 -Markush datafeed

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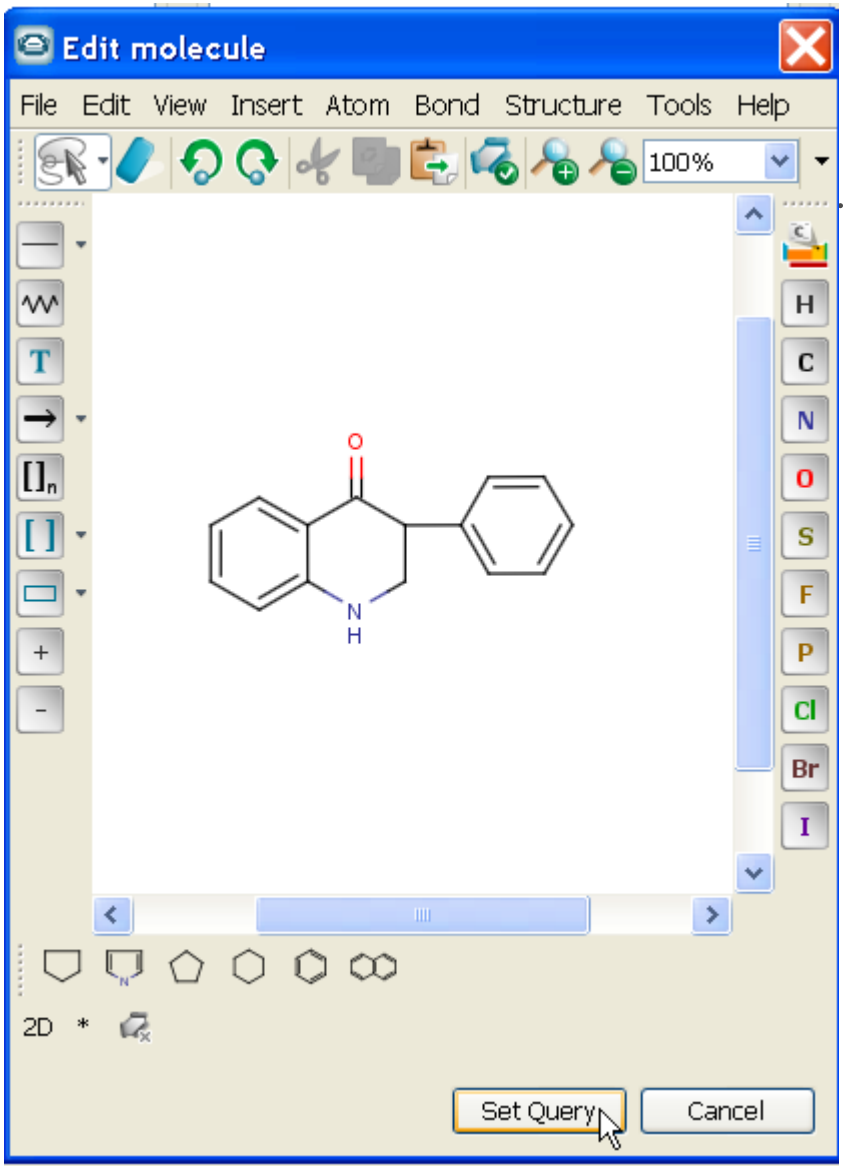
What is the biggest problem with searching markush patents?

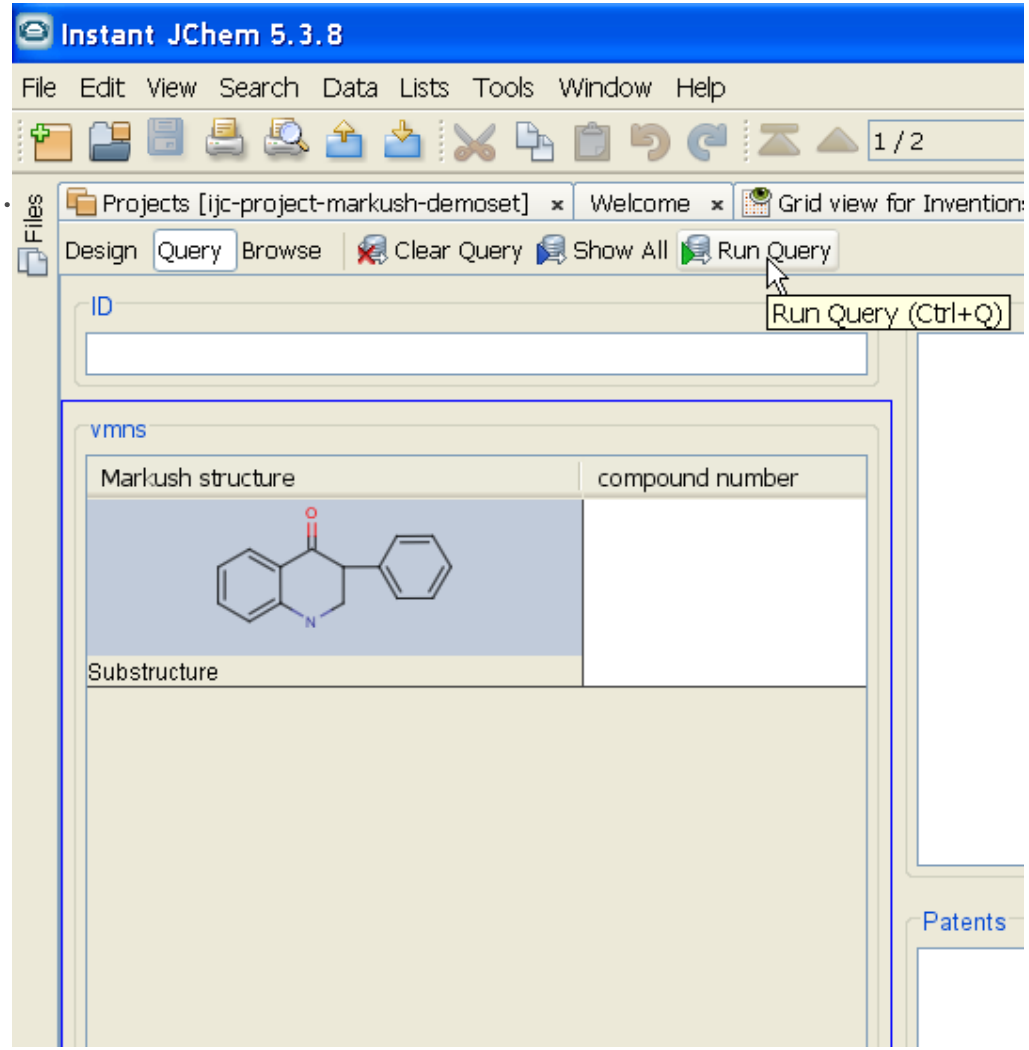
- Designing the best search to find them?
- Understanding them once you have found them?
- Finding white space around them?

MARKUSH DATA FEED CONTENT

- Markush from ~550,000 patent families
  - re-drawn & stored in Thomson Reuters vmn file format
  - plus 1.7m related specific compounds
  - plus the corresponding DWPI records in cXML format
  - from 26 patent issuing authorities
  - covers pharmaceutical, agrochemical and general chemistry patents
- Complete data set now available
  - DWPI Markush data back to 1987
  - All DCR structural records included (including patents with no markush structures)
  - INPI data also added
- Indexed as part of the editorial process that creates Derwent World Patents Index (DWPI) which can form part of the datafeed
  - Informative English language titles & abstracts from worldwide patents
  - Patent family listing, patent assignees



Draw the structure



Substructure search against the Markush dataset

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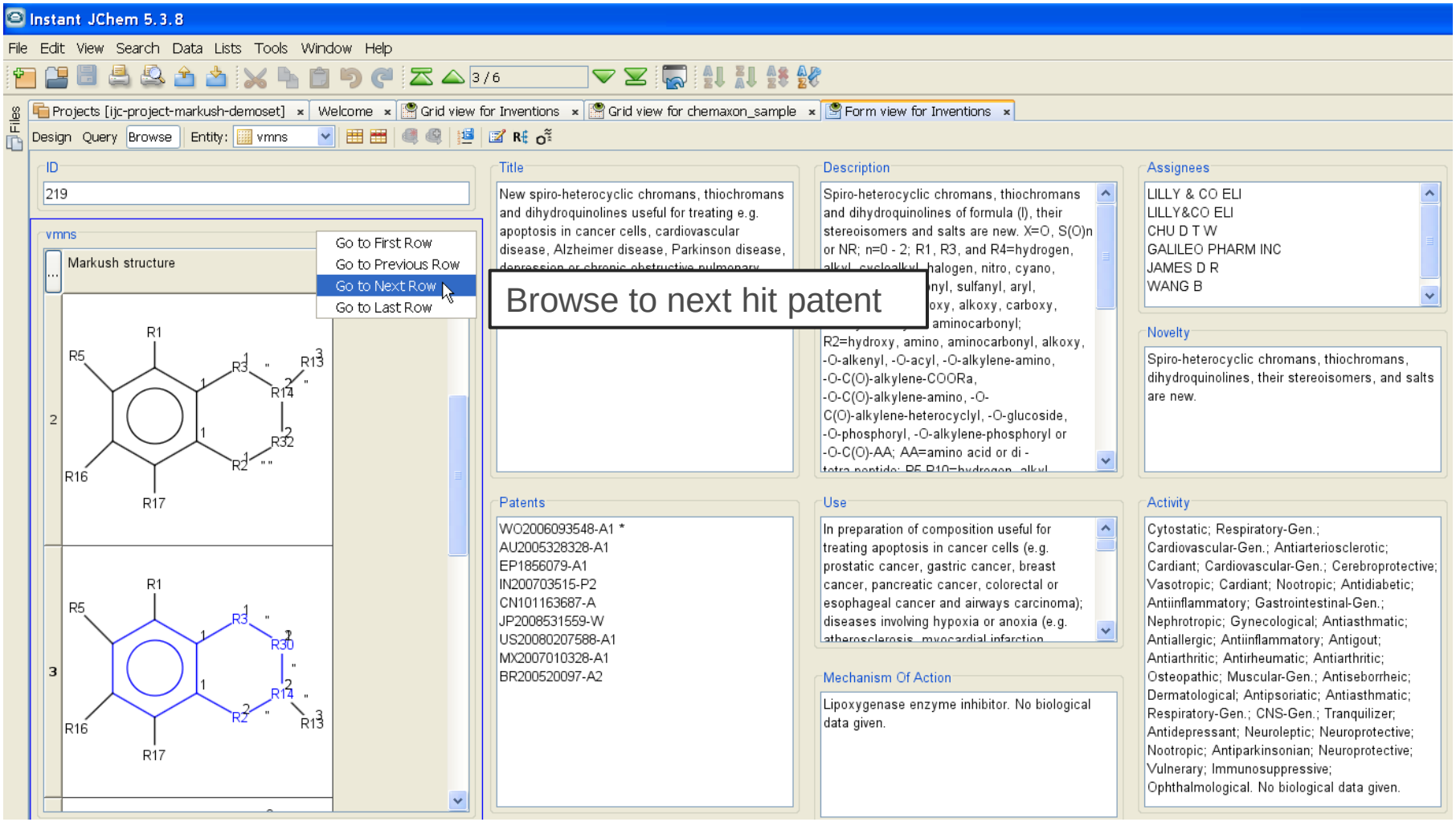
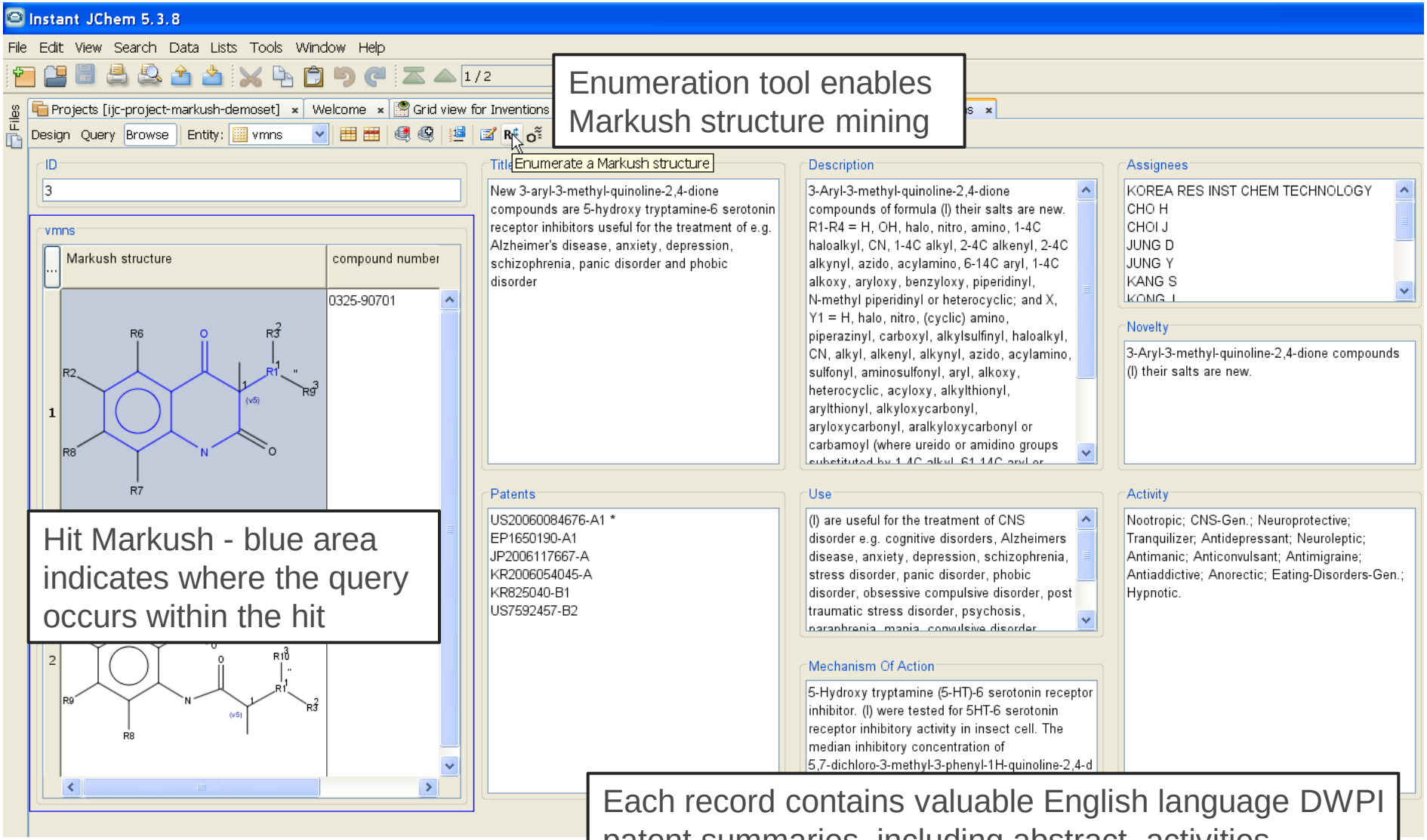
Hit patent #1


Instant JChem 5.3.8
File Edit View Search Data Lists Tools Window Help
Projects [ijc-project-markush-demoset]
Welcome
Grid view for Inventions
Grid view for chemaxon_sample
Form view for Inventions
Design Query Browse Entity: vmns
ID
219
vmns
Markush structure
Go to First Row
Go to Previous Row
Go to Next Row
Go to Last Row
Browse to next hit patent
Title
New spiro-heterocyclic chromans, thiochromans and dihydroquinolines useful for treating e.g. apoptosis in cancer cells, cardiovascular disease, Alzheimer disease, Parkinson disease,
Description
Spiro-heterocyclic chromans, thiochromans and dihydroquinolines of formula (I), their stereoisomers and salts are new. X=O, S(O)n or NR; n=0 - 2; R1, R3, and R4=hydrogen,
R2=hydroxy, amino, aminocarbonyl, alkoxy, -O-alkenyl, -O-acyl, -O-alkylene-amino, -O-C(O)-alkylene-COORa, -O-C(O)-alkylene-amino, -O-C(O)-alkylene-heterocyclyl, -O-glucoside, -O-phosphoryl, -O-alkylene-phosphoryl or -O-C(O)-AA; AA=amino acid or di -
Assignees
LILLY & CO ELI
LILLY&CO ELI
CHU D T W
GALILEO PHARM INC
JAMES D R
WANG B
Novelty
Spiro-heterocyclic chromans, thiochromans, dihydroquinolines, their stereoisomers, and salts are new.
Patents
WO2006093548-A1 *
AU2005328328-A1
EP1856079-A1
IN200703515-P2
CN101163687-A
JP2008531559-W
US20080207588-A1
MX2007010328-A1
BR200520097-A2
Use
In preparation of composition useful for treating apoptosis in cancer cells (e.g. prostatic cancer, gastric cancer, breast cancer, pancreatic cancer, colorectal or esophageal cancer and airways carcinoma); diseases involving hypoxia or anoxia (e.g.
Mechanism Of Action
Lipoxygenase enzyme inhibitor. No biological data given.
Activity
Cytostatic; Respiratory-Gen.; Cardiovascular-Gen.; Antiarteriosclerotic; Cardiant; Cardiovascular-Gen.; Cerebroprotective; Vasotropic; Cardiant; Nootropic; Antidiabetic; Antiinflammatory; Gastrointestinal-Gen.; Nephrotropic; Gynecological; Antiasthmatic; Antiallergic; Antiinflammatory; Antigout; Antiarthritic; Antirheumatic; Antiarthritic; Osteopathic; Muscular-Gen.; Antiseborrheic; Dermatological; Antipsoriatic; Antiasthmatic; Respiratory-Gen.; CNS-Gen.; Tranquilizer; Antidepressant; Neuroleptic; Neuroprotective; Nootropic; Antiparkinsonian; Neuroprotective; Vulnerary; Immunosuppressive; Ophthalmological. No biological data given.

Hit patent #2

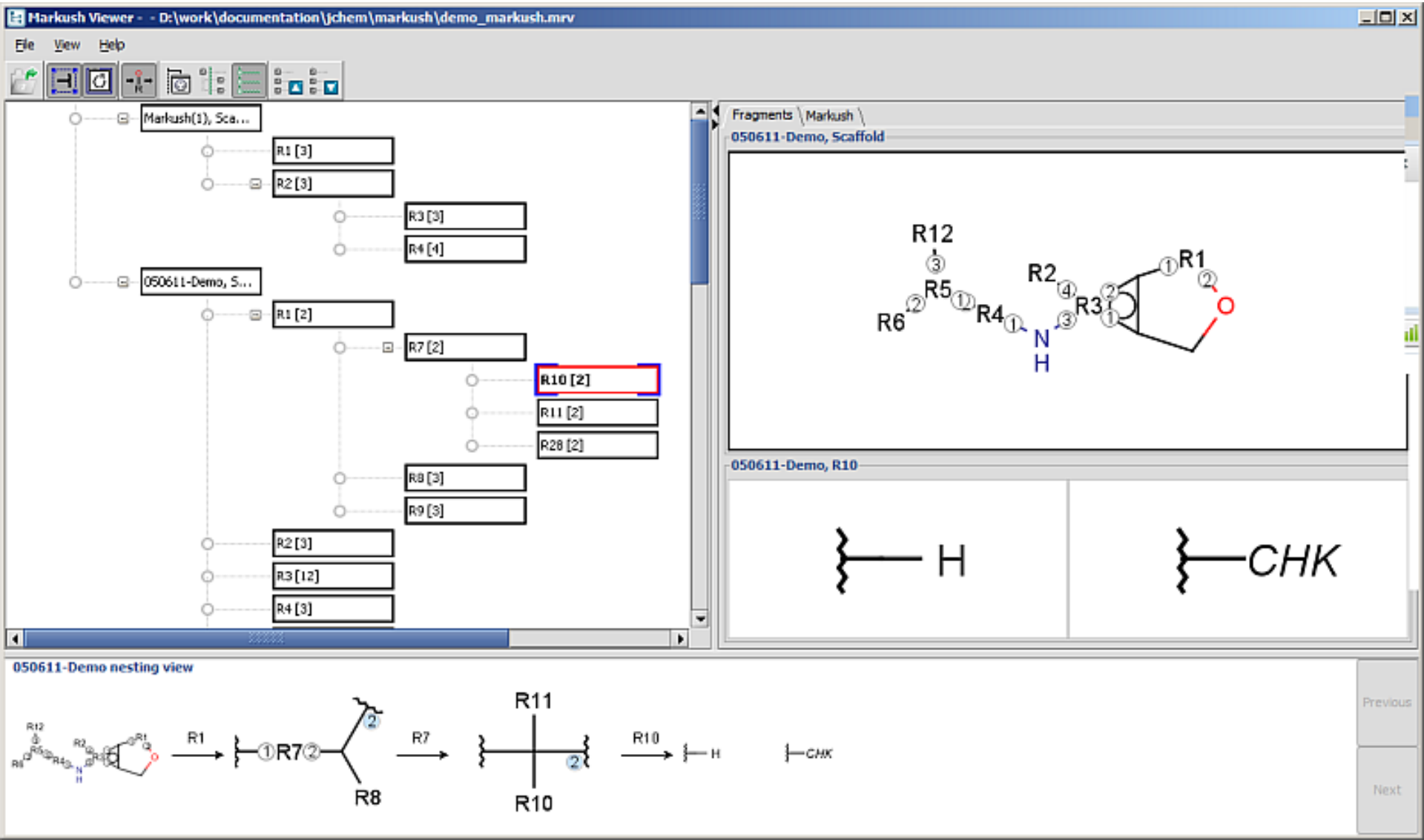


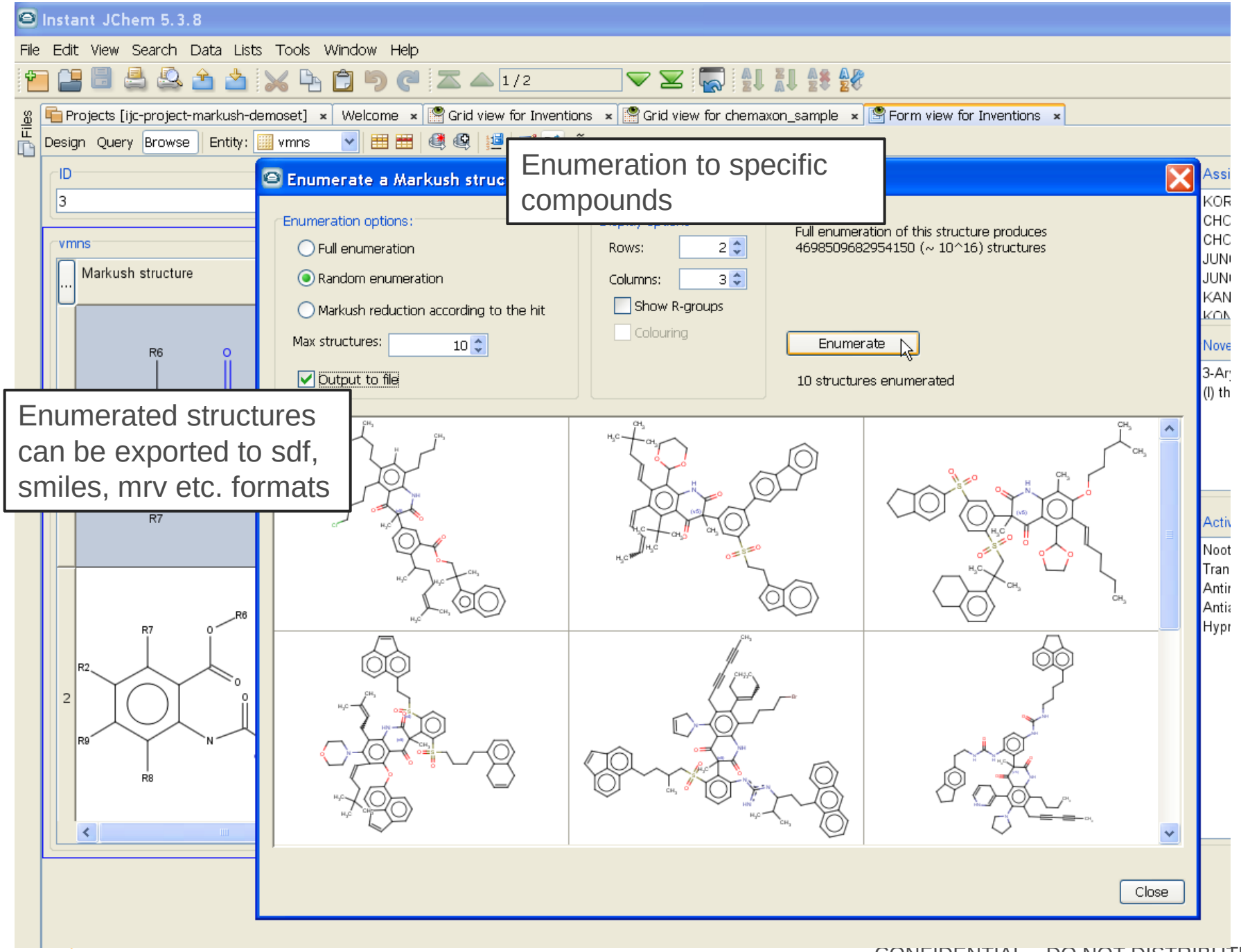
Enumeration tool enables Markush structure mining

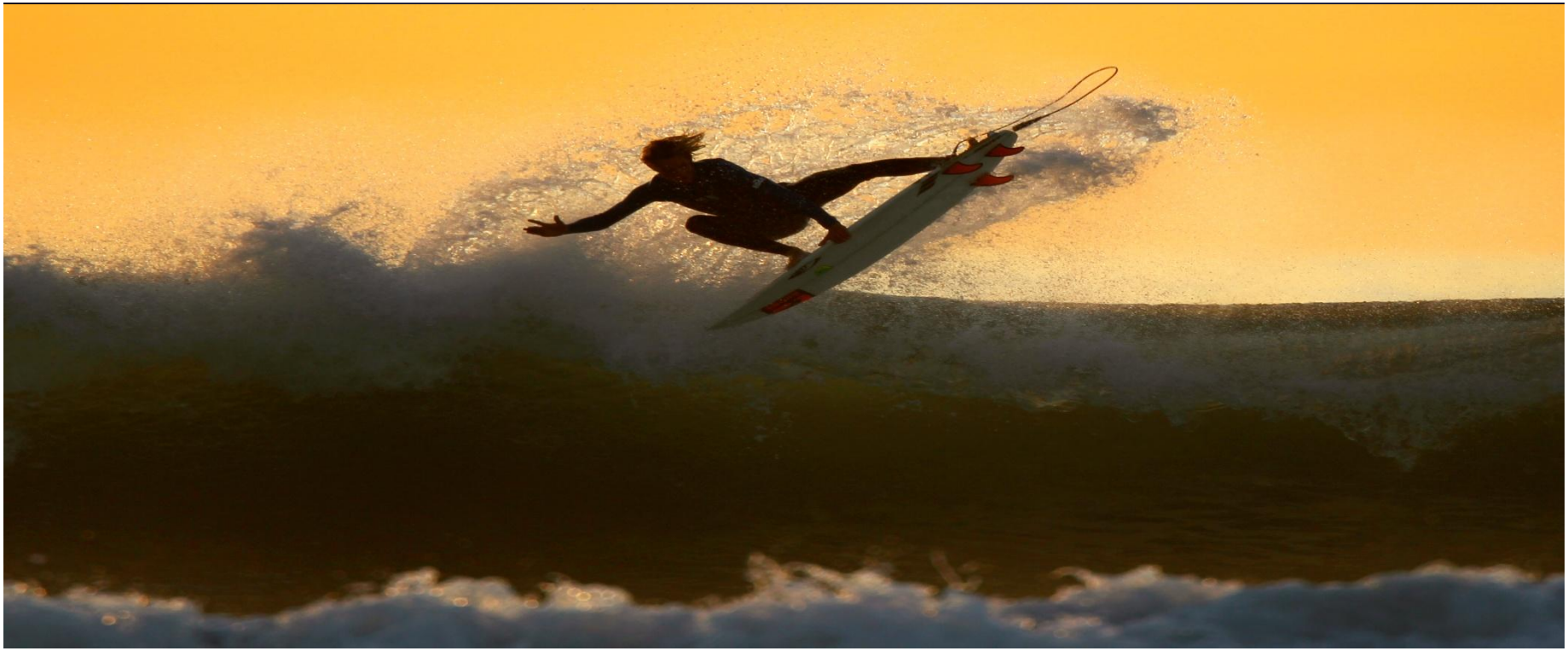
Hit Markush - blue area indicates where the query occurs within the hit

Each record contains valuable English language DWPI patent summaries, including abstract, activities, Mechanisms of Action, patent family, assignees etc. All text fields are searchable

CHEMAXON MARKUSH VIEWER







THANK YOU

Q&A

steve.hajkowski@thomsonreuters.com

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