

CAS IP FINDER, POWERED BY STN™

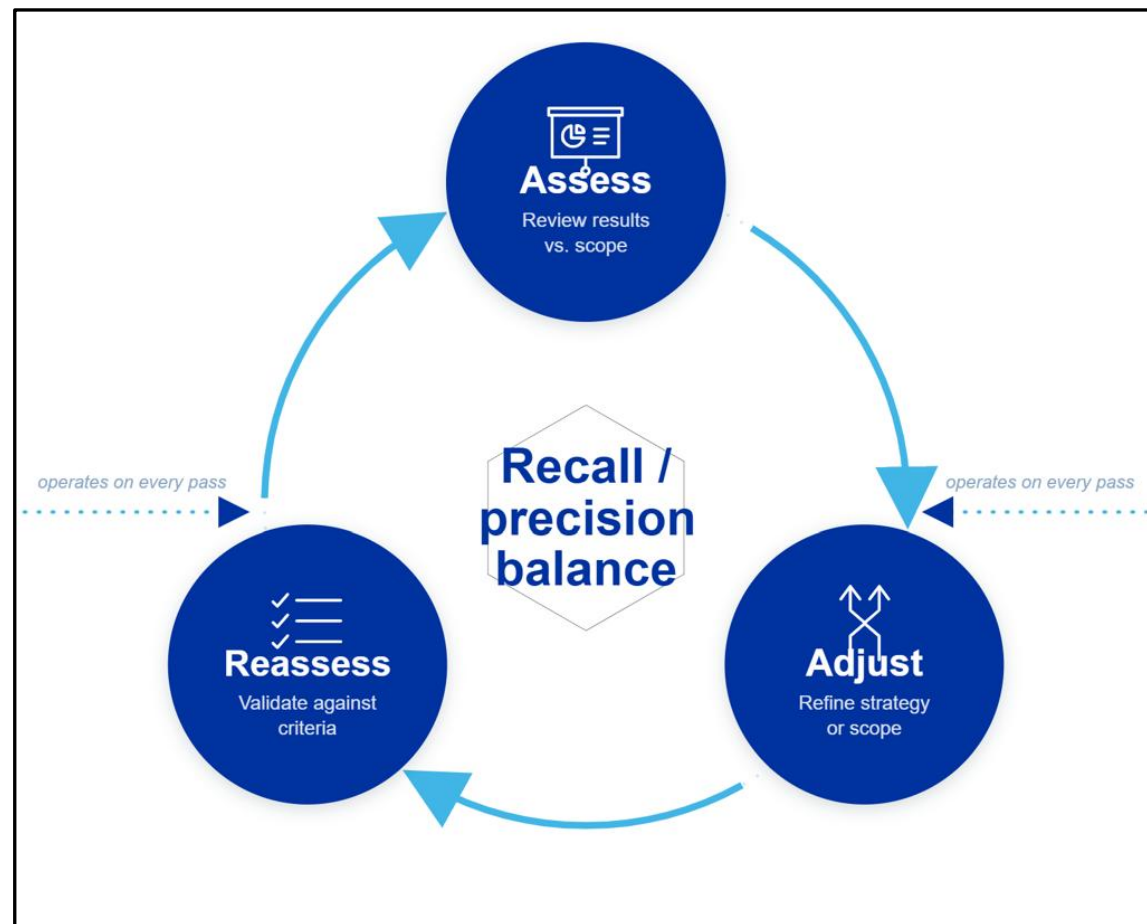
Webinar:

An Expert's Guide to How Agentic AI Improves Patent Search Workflows

The Human Balancing Act

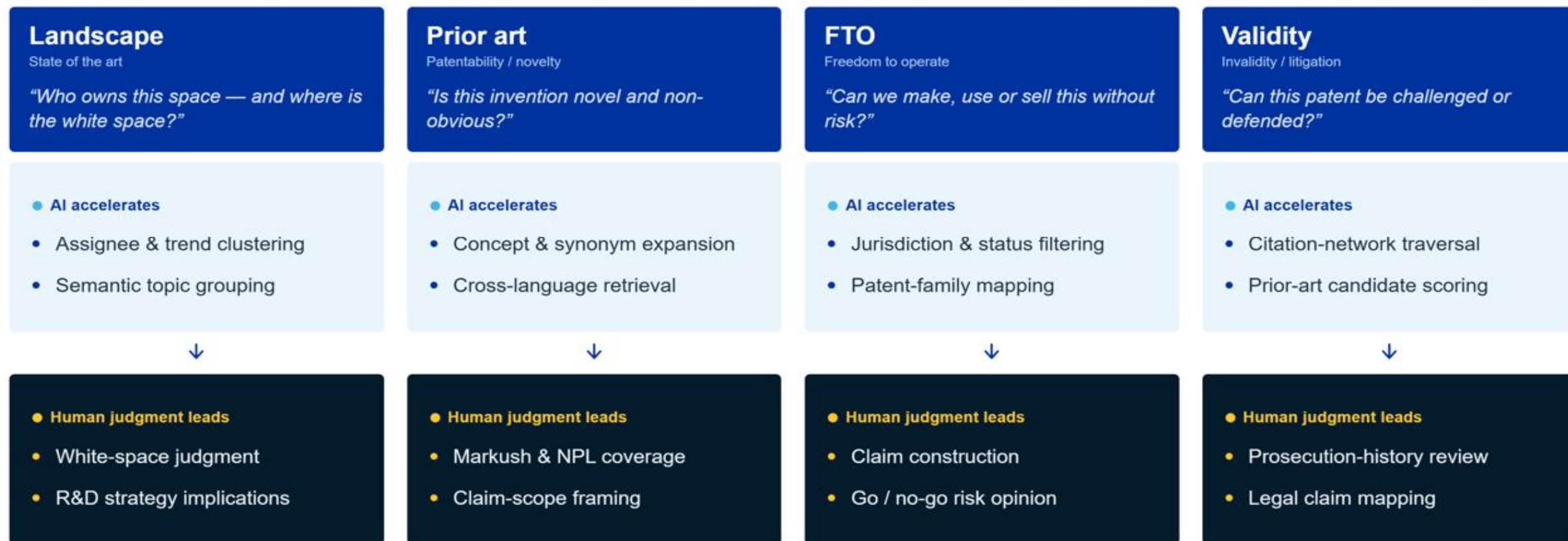
Every search is a tradeoff between finding everything and staying manageable

- Casting a wider net catches more relevant art but buries it in noise; narrowing the search cuts noise but risks missing the one reference that matters.
- The right balance shifts with the purpose of the search, and there's no universal setting that works for every project.
- That balance is held together by ongoing human judgment: assess results, adjust the strategy, reassess against the criteria, repeat.



Every Search Hands Off from Machine to Expert

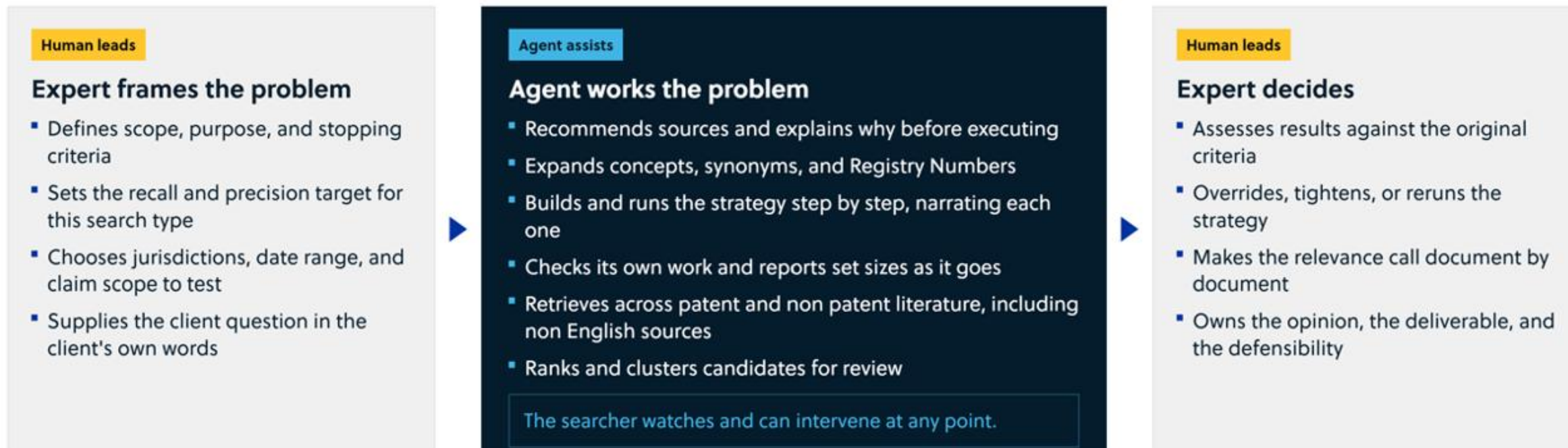
Read each column top to bottom: The AI narrows and ranks the field, then expert judgment makes the call.



AI retrieves & ranks — experts interpret & decide

The Expert Frames It, the Agent Works It, the Expert Decides

Read left to right: The agent sits within the search, performing the retrieval and ranking that the expert would otherwise do by hand. The decision never leaves the expert.



Where the agent adds time, and where it stays out of the way

The Agent Handles the Edges, the Expert Owns the Middle

Two places the agent pays for itself: Understanding the question before the search starts, and turning results into something a client can after it ends. The search itself stays with the expert.

Agent, pre search

Before the search, agent assists understanding

- Interprets the client question and restates it as searchable concepts
- Expands terminology, synonyms, and cross language equivalents
- Detects keywords and Registry Numbers from free text and structures
- Recommends sources from 100 plus databases and explains the rationale
- Flags what the question is missing before time gets spent
- Surfaces prior work and known art as orientation

Human leads

The search, expert owns it

- Builds and iterates the strategy
- Runs the recall and precision loop: assess, adjust, reassess
- Applies structure, sequence, and Markush searching where the answer lives
- Judges relevance document by document
- Decides when the search is complete and defensible

This is the work that carries the risk, so it stays with the professional.

Agent, post search

After the search, agent assists reporting

- Summarizes and clusters the result set by concept, assignee, or family
- Drafts the narrative, tables, and citation formatting
- Highlights the scientific data inside dense claim text for faster review
- Assembles the audit trail: strategy, sources, and set sizes
- Produces a first draft deliverable the expert edits rather than writes

CAS Newton Returns Control to the Searcher



Complete search strategy: **L10 = 738 documents.**

Would you like to:

Narrow results — by year, specific drugs, or treatment efficacy

Display results with abstracts

Analyze the dataset — top authors, journals, recent trends

Export or save

Partner behavior

Newton hands control back and surfaces options rather than deciding what happens next.

Sample of L7 · relevant output

The strategy produced substantive, on-topic documents.

Prevalence and risk factors related to *Fasciola* spp. transmission in north-Central Vietnam.

One Health · June 2026 · Vol. 22

Morphometric diversity of *Fasciola gigantica* and in-vitro fasciolicidal activity of *Combretum nigricans* extracts.

Parasitology International · October 2026 · Vol. 114

Veterinary practitioners' perspectives on pasture-transmitted parasites in sheep and cattle.

Veterinary Parasitology: Regional Studies · May 2026 · Vol. 70

CAS Newton Recommends the Right Databases

What databases would be relevant for researching liver fluke infection and its treatment in cattle?

9:28 AM



Here are the most relevant databases for your research:

Primary · AGRICOLA — veterinary medicine and livestock health, controlled-term searching, coverage 1970–present.

Complementary · BIOSIS — biological and medical parasitology, pathology, and pharmacology, coverage 1926–present.

Efficient approach — use the BIOSCIENCE cluster to search both at once.

✓ `FILE BIOSCIENCE`

✓ `S (liver fluke? OR fasciol?) AND cattle AND treatment`



Would you like me to start searching, or refine the strategy first?

Partner behavior

Newton recommends databases and explains *why* before executing a single command.

CAS Newton Builds and Evaluates, Step by Step

Use BIOSIS. Build a search strategy for anthelmintic treatments and therapeutic compounds used to control *Fasciola hepatica* and *Fasciola gigantica* infections in cattle.

Connecting to the database

✓ FILE BIOSIS

Parasite organism set

✓ S *Fasciola hepatica* OR *Fasciola gigantica* L1 6,946

Cattle / bovine host

✓ S cattle OR bovine OR (Bos(W)taurus) OR calf OR calves L2 603,671

Combine parasite and host

✓ S L1 AND L2 L3 1,758

Treatment / anthelmintic concept

✓ S anthelmintic? OR anthelminthic? OR fasciolicide? OR trematocide? L4 12,560

Broader treatment terms

✓ S treatment? OR therap? OR drug? OR control OR chemotherap? L5 13.7M

Combine all treatment terms

✓ S L4 OR L5 L6 13.7M

Combine with the *Fasciola*-in-cattle set

✓ S L3 AND L6 L7 733

Verify relevance · check which terms are firing

✓ D L7 1-10 TI AU SO PY

✓ D L7 1-5 HIT

Add specific drug names

✓ S triclabendazole OR albendazole OR closantel OR clorsulon OR nitroxylin L8 7,139

Combine drugs with the set

✓ S L3 AND L8 L9 185

Final set

✓ S L7 OR L9 L10 738

Iterative build

Newton narrates each step, runs it, and reads the result before moving on. The searcher watches and can intervene at any point.

Checks its own work

Newton adjusts display formats to confirm the terms are relevant and appropriate.

Final set

738 documents

Built and quality-checked in under two minutes.

1. CA CONTROLLED TERMS (/CT) - Thesaurus Exploration

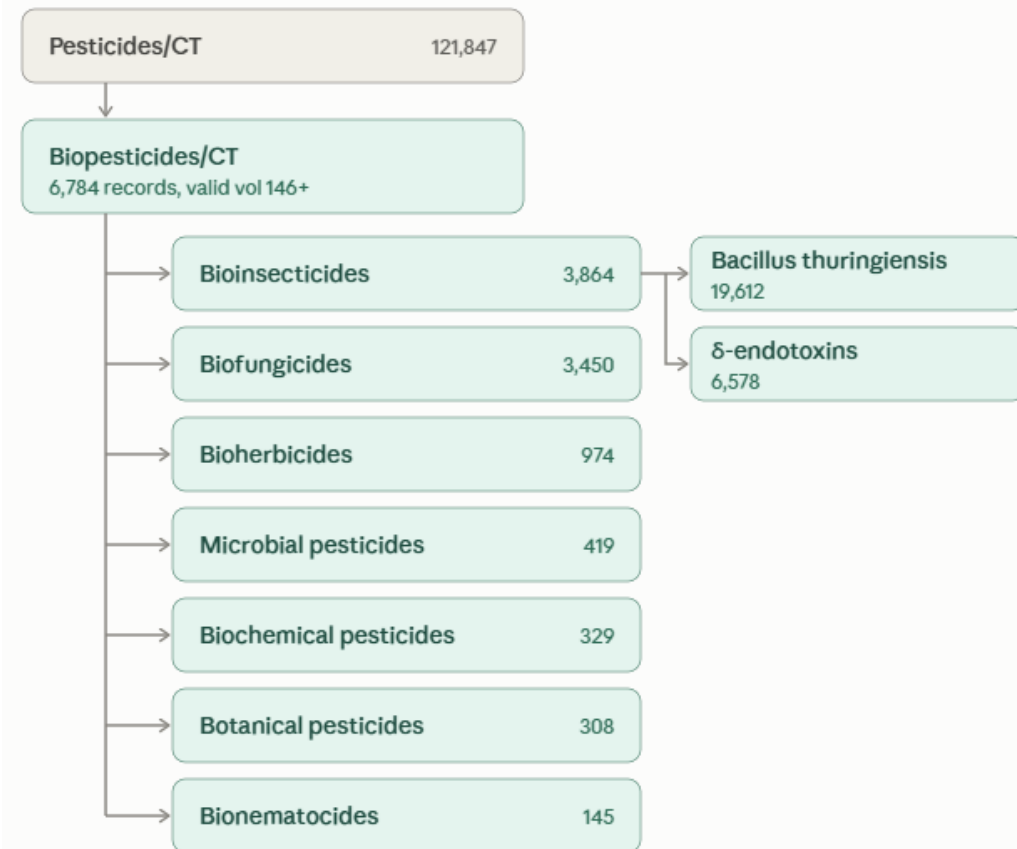
Primary Biopesticide Terms

BIOPESTICIDES/CT (6,784 records) - *Main umbrella term*

- **Definition:** Pesticides based on microorganisms, substances produced by plants, plant-incorporated protectants, or other naturally occurring substances or their synthetic analogs that control pests
- **Valid heading:** Volume 146 (2007) to present

Hierarchical Structure (Broader Terms):

```
Science/CT (BT4)
├─ Agriculture and Agricultural chemistry/CT (BT3)
│   └─ Agrochemicals/CT (BT2)
│       └─ Agronomical preparations/CT (BT2)
│           └─ Agricultural biological agents/CT (BT1)
│               └─ BIOPESTICIDES/CT
Materials/CT (BT4)
├─ Chemicals/CT (BT3)
│   └─ Bioactive agents/CT (BT3)
│       └─ Biocides/CT (BT2)
│           └─ Pesticides/CT (BT1, 121,847 records)
│               └─ BIOPESTICIDES/CT
```



=> E C07K0016-114/CPC 5

E#	FREQUENCY	AT	TERM
--	-----	--	----
E1	689	1	C07K0016-11/CPC
E2	132	2	C07K0016-112/CPC
E3	395	4	--> C07K0016-114/CPC
E4	130	1	C07K0016-1143/CPC
E5	865	1	C07K0016-1145/CPC

=> E E3+HIE/CPC

E1	0	BT8	C/CPC CHEMISTRY;METALLURGY (2013-01-01)
E2	0	BT7	C0/CPC CHEMISTRY (2013-01-01)
E3	0	BT6	C07/CPC ORGANIC CHEMISTRY (2019-05-01)
E4	322782	BT5	C07K/CPC PEPTIDES reference: peptides in foodstuffs A23; obtaining protein compositions for foodstuffs, working-up proteins for foodstuffs A23J; preparations for medicinal purposes A61K; peptides containing C07K0016-00/CPC (2026-01-01) Immunoglobulins (IG), e.g. monoclonal or polyclonal antibodies
E5	10163	BT4	C07K0016-08/CPC (2013-01-01) against material from viruses
E6	532	BT3	C07K0016-10/CPC (2026-01-01) RNA viruses
E7	3609	BT2	C07K0016-112/CPC (2026-01-01) Retroviridae (F), e.g. leukemia viruses
E8	132	BT1	C07K0016-114/CPC (2026-01-01) Lentivirus (G), e.g. human immunodeficiency virus (HIV), feline immunodeficiency virus (FIV) or simian immunodeficiency virus (SIV)
E9	395	-->	

C07K 322,782
peptides and antibodies

★ C07K0016-114 395
lentivirus, names FIV

C07K0016-1145 865
env proteins, gp120

C07K0016-1143 130
gag-pol, p17 and p24

C07K0016-1147 57
regulatory proteins, tat

A61P 778,165
therapeutic activity

A61P0031-12 36,029
antivirals

★ A61P0031-14 28,884
for RNA viruses

A61P0031-18 17,742
for HIV

C12N 481,598
vectors and engineering

C12N0015-867 1,024
retroviral vectors

C12Q 237,380
nucleic acid testing

★ C12Q0001-702 495
for retroviruses

C12Q0001-703 1,245
viruses linked to AIDS

C12Q0001-70 3,472
virus or bacteriophage

A61K 1,175,912
medicinal preparations

★ A61K0039-21 1,714
retroviridae antigens

A61K0039-12 20,386
viral antigens

G01N 1,016,584
immunoassay

★ G01N0033-56983 12,320
virus immunoassay

★ must include ☒ high priority ☐ supplementary

Thank you



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