US 12788009 B2: Insect neuropeptides 2

Case	US 12788009 B2: Insect neuropeptides 2
Case ID	`59b75314-e20a-4386-b5f1-8e6f0f0b770c`
Started	2026-11-21 21:54 UTC by ConductScience
Application	US 19/044,923
Prior art date	2025-02-04 (filing date)
Searches	2: 2 run from the plan, 0 added
Chosen results	0 publications and 0 matches kept
Notes	0
Case log	12 events; every event checks out
Last log event	Event 12, 2026-11-21 21:54 UTC
Last event SHA-256	`1e1408af67ef2d529d239054cb54307335fb17ff515d6814922c31b7558cf884`

Each search below names its record fingerprint: the SHA-256 that Sequences computed over the search record when the search finished. Opened in Sequences, the search shows the same value as recordSha256 under Search record. Any change to the record would change it.

Claims and plan

Claims	9 claims from US 12788009 B2, imported 2026-11-21 21:54 UTC
Claims SHA-256	`0e4b460f97d52240828fcaa166e33d43bd74274d1946b32b050e1bdcc5ca6a51`
Claim set	Set 1, as granted, 2026-11-10, from US 12788009 B2, publication XML
Features	3: 3 accepted
Plan	Version 1, locked 2026-11-21 21:54 UTC, 2 searches
Plan SHA-256	`2db728bcddf399567a5ba2bb06a78f9acf71e4aeaf288fead2464ce08a604108`
Plan follows	Set 1, as granted, 2026-11-10, from US 12788009 B2, publication XML, the current set
Its claims SHA-256	`0e4b460f97d52240828fcaa166e33d43bd74274d1946b32b050e1bdcc5ca6a51`

The plan's searches

Plan version 1, locked 2026-11-21 21:54 UTC by ConductScience. Plan SHA-256 2db728bcddf399567a5ba2bb06a78f9acf71e4aeaf288fead2464ce08a604108. Each search runs as written here.

The plan follows set 1, as granted, 2026-11-10, from US 12788009 B2, publication XML. Claims SHA-256 0e4b460f97d52240828fcaa166e33d43bd74274d1946b32b050e1bdcc5ca6a51.

Search	Query	Method	Set	Thresholds	Reason
P1	SEQ ID NOs: 1 to 2 from the listing	Automatic	Patent proteins, snapshot 2026-11-15-5a1ef4c7dc45	Published before 2025-02-04	SEQ ID NOs: 1 to 2, in claims 1 and 5: as written.
P2	SEQ ID NOs: 1 to 2 from the listing	Automatic	Swiss-Prot, snapshot 2026-11-21-2e90a63c4527	Published before 2025-02-04	SEQ ID NOs: 1 to 2, in claims 1 and 5: as written.

Features no search covered

Every kept feature had a search when this version was locked.

Notes

This case has no notes.

Searches

#	Search	In the case	Finished (UTC)	Matches	Kept
1	US 12788009 B2: Insect neuropeptides 2, plan 1 P1: SEQ ID NO: 1 to 2	Plan 1, P1	2026-11-21 22:00	139	0
2	US 12788009 B2: Insect neuropeptides 2, plan 1 P2: SEQ ID NO: 1 to 2	Plan 1, P2	2026-11-21 22:01	1,056	0

By applicant

Nothing is kept in this case's searches yet, so no applicant is listed.

Search 1: US 12788009 B2: Insect neuropeptides 2, plan 1 P1: SEQ ID NO: 1 to 2

Search ID	`256bac9d-0a89-4c86-a0ab-c78df673b4d9`
In this case	Run from plan version 1, search P1, by ConductScience on 2026-11-21 21:54 UTC
Finished	2026-11-21 22:00 UTC
Data searched	Public patent sequences: Patent proteins (10,503,428 sequences, 1,720,506,211 letters)
Data version	Snapshot 2026-11-15-5a1ef4c7dc45, set patent_prot, sources to 2026-11-15, no additions
Engine	FASTA 36.3.8i; Sequences search engine 0.21.0
Settings	engine: Automatic; tool: ssearch36; program: blastp; query: protein
Plan filters	The tables below show matches with published before 2025-02-04, as the plan set
Query fingerprint	`972c560a16bf9e54ae44bc29e5455567a583f8f25ca5aff1b14df9e56476b020`
Record fingerprint	`195d668f0df1fbf64279e24557beca93973cd5efc56ec058ef432f62769c1d95`

Smith-Waterman compares each query with every stored sequence. Each query returns up to 5,000 sequences, with the best alignment of each. FASTA36 fits its E-values to a random sample of scores, so a sequence near the cutoff can come and go between runs. These results do not establish patentability.

Queries

Query	Length	Matches	Listed	Limit reached
SEQ_ID_NO_1	11		80	No
SEQ_ID_NO_2	11		59	No

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>SEQ_ID_NO_1  (11 letters)
      1  AIMARPQVPR L

>SEQ_ID_NO_2  (11 letters)
      1  AIMARPQVPR L
```

Top publications

The first 15 of 170 publications, by best query match.

Publication	Published	Filed	Applicant	Title	Best query match	Matches
EP 4361167-A1	2024-05-01	2023-10-23, priority 2022-10-25	SOLASTA BIO LTD	INSECT NEUROPEPTIDES	100%	2
EP 4361168-A1	2024-05-01	2023-10-23, priority 2022-10-25	SOLASTA BIO LTD	INSECT NEUROPEPTIDES	100%	2
EP 4361169-A1	2024-05-01	2023-10-23, priority 2022-10-25	SOLASTA BIO LTD	INSECT NEUROPEPTIDES	100%	2
US 12139556-B2	2024-11-12		Solasta Bio Limited	Insect neuropeptides 6	100%	2
US 12245588-B1	2025-03-11		Solasta Bio Limited	Insect neuropeptides 2	100%	2

Publication	Published	Filed	Applicant	Title	Best query match	Matches
US 12245596-B1	2025-03-11		Solasta Bio Limited	Insect neuropeptides 8	100%	2
US 12279621-B1	2025-04-22		Solasta Bio Limited	Insect neuropeptides 3	100%	2
US 12281143-B1	2025-04-22		Solasta Bio Limited	Insect neuropeptides 1	100%	2
JP 2025071815-A	2025-05-08		SOLASTA BIO LIMITED	INSECT NEUROPEPTIDES 2	100%	2
JP 2025071816-A	2025-05-08		SOLASTA BIO LIMITED	INSECT NEUROPEPTIDES 3	100%	2
JP 2025071817-A	2025-05-08		SOLASTA BIO LIMITED	INSECT NEUROPEPTIDES 4	100%	2
US 12302908-B2	2025-05-20		Solasta Bio Limited	Insect neuropeptides 4	100%	2
EP 4570072-A2	2025-06-18	2023-10-23, priority 2023-10-23	SOLASTA BIO LTD	INSECT NEUROPEPTIDES 8	100%	2
US 12356995-B2	2025-07-15		Solasta Bio Limited	Insect neuropeptides 9	100%	2
US 12404302-B2	2025-09-02		Solasta Bio Limited	Insect neuropeptides 6	100%	2

Top matches

The first 25 of 114 matches, in the order the results list them.

Row	Query	Match	Publication	First published	Query Match	Identity	Query coverage	E-value
1	SEQ_ID_NO_1	EP20230205098_3.1	EP 4361167-A1	2024-05-01	100%	100%	100%	0.03
81	SEQ_ID_NO_2	EP20230205098_3.1	EP 4361167-A1	2024-05-01	100%	100%	100%	0.036
2	SEQ_ID_NO_1	AUF63361.1	JP 2013535206-A	2013-09-12	77.8%	70%	90.9%	100
82	SEQ_ID_NO_2	AUF63361.1	JP 2013535206-A	2013-09-12	77.8%	70%	90.9%	110
3	SEQ_ID_NO_1	HD077195.1	WO 2010075143-A1	2010-07-01	74.1%	80%	90.9%	150
12	SEQ_ID_NO_1	HD072325.1	WO 2010075143-A1	2010-07-01	74.1%	80%	90.9%	360
83	SEQ_ID_NO_2	HD077195.1	WO 2010075143-A1	2010-07-01	74.1%	80%	90.9%	160
92	SEQ_ID_NO_2	HD072325.1	WO 2010075143-A1	2010-07-01	74.1%	80%	90.9%	390
43	SEQ_ID_NO_1	AJN18270.1	EP 2279258-A2	2011-02-02	72.2%	60%	90.9%	760
122	SEQ_ID_NO_2	AJN18270.1	EP 2279258-A2	2011-02-02	72.2%	60%	90.9%	820
13	SEQ_ID_NO_1	QDA85835.1	US 10260073-B2	2019-04-16	72.2%	80%	90.9%	400

Row	Query	Match	Publication	First published	Query Match	Identity	Query coverage	E-value
14	SEQ_ID_NO_1	QDA85834.1	US 10260073-B2	2019-04-16	72.2%	80%	90.9%	400
93	SEQ_ID_NO_2	QDA85835.1	US 10260073-B2	2019-04-16	72.2%	80%	90.9%	430
94	SEQ_ID_NO_2	QDA85834.1	US 10260073-B2	2019-04-16	72.2%	80%	90.9%	440
6	SEQ_ID_NO_1	AGD89464.1	WO 2008097467-A1	2008-08-14	70.4%	63.6%	100%	260
86	SEQ_ID_NO_2	AGD89464.1	WO 2008097467-A1	2008-08-14	70.4%	63.6%	100%	280
18	SEQ_ID_NO_1	AOK95259.1	EP 2052088-A2	2009-04-29	70.4%	63.6%	100%	420
98	SEQ_ID_NO_2	AOK95259.1	EP 2052088-A2	2009-04-29	70.4%	63.6%	100%	460
4	SEQ_ID_NO_1	ABU01125.1	US 7214786-A	2007-05-08	68.5%	70%	90.9%	190
84	SEQ_ID_NO_2	ABU01125.1	US 7214786-A	2007-05-08	68.5%	70%	90.9%	210
19	SEQ_ID_NO_1	ACP92980.1	US 7504490-A	2009-03-17	68.5%	54.5%	100%	470
99	SEQ_ID_NO_2	ACP92980.1	US 7504490-A	2009-03-17	68.5%	54.5%	100%	510
24	SEQ_ID_NO_1	CQ373127.1	WO 0181581-A2	2001-11-01	64.8%	60%	90.9%	590
104	SEQ_ID_NO_2	CQ373127.1	WO 0181581-A2	2001-11-01	64.8%	60%	90.9%	650
47	SEQ_ID_NO_1	ABU03931.1	US 7214786-A	2007-05-08	64.8%	63.6%	100%	790

Search 2: US 12788009 B2: Insect neuropeptides 2, plan 1 P2: SEQ ID NO: 1 to 2

Search ID	`9b628c02-7e34-4323-b065-b5c00de12123`
In this case	Run from plan version 1, search P2, by ConductScience on 2026-11-21 21:54 UTC
Finished	2026-11-21 22:01 UTC
Data searched	UniProt reviewed proteins: Swiss-Prot (487,796 sequences, 186,172,811 letters)
Data version	Snapshot 2026-11-21-2e90a63c4527, set swissprot, sources to 2026-11-21, no additions
Engine	FASTA 36.3.8i; Sequences search engine 0.21.0
Settings	engine: Automatic; tool: ssearch36; program: blastp; query: protein
Plan filters	The tables below show matches with published before 2025-02-04, as the plan set
Query fingerprint	`972c560a16bf9e54ae44bc29e5455567a583f8f25ca5aff1b14df9e56476b020`
Record fingerprint	`70e9e66914b1660c0bad7815d8d98196daeea36392147904c13b89b6eab01f37`

Smith-Waterman compares each query with every stored sequence. Each query returns up to 5,000 sequences, with the best alignment of each. FASTA36 fits its E-values to a random sample of scores, so a sequence near the cutoff can come and go between runs. These results do not establish patentability.

Queries

Query	Length	Matches	Listed	Limit reached
SEQ_ID_NO_1	11		540	No
SEQ_ID_NO_2	11		516	No

```
>SEQ_ID_NO_1  (11 letters)
      1  AIMARPQVPR L

>SEQ_ID_NO_2  (11 letters)
      1  AIMARPQVPR L
```

Top publications

All 2 publications, by best query match.

Publication	Published	Applicant	Title	Best query match	Matches
WO 03000898	2003-01-03		Plant genes involved in defense against pathogens.	59.3%	2
JP 2003533178	2003-11-11		O-superfamily conotoxin peptides.	48.1%	2

Top matches

The first 25 of 1,056 matches, in the order the results list them.

Row	Query	Match	Publication	First published	Query Match	Identity	Query coverage	E-value
6	SEQ_ID_NO_1	O32975		1998-01-01	70.4%	70%	90.9%	36

Row	Query	Match	Publication	First published	Query Match	Identity	Query coverage	E-value
546	SEQ_ID_NO_2	O32975		1998-01-01	70.4%	70%	90.9%	37
1	SEQ_ID_NO_1	Q9LYY2		2000	70.4%	63.6%	100%	5.9
541	SEQ_ID_NO_2	Q9LYY2		2000	70.4%	63.6%	100%	6.1
11	SEQ_ID_NO_1	Q82K53		2001	70.4%	87.5%	72.7%	63
553	SEQ_ID_NO_2	Q82K53		2001	70.4%	87.5%	72.7%	66
7	SEQ_ID_NO_1	A2BGH0		2004	70.4%	63.6%	100%	36
547	SEQ_ID_NO_2	A2BGH0		2004	70.4%	63.6%	100%	38
2	SEQ_ID_NO_1	Q9KN74		2000	68.5%	75%	72.7%	8
542	SEQ_ID_NO_2	Q9KN74		2000	68.5%	75%	72.7%	8.3
5	SEQ_ID_NO_1	A4XMY1		2007-05-29	68.5%	70%	90.9%	32
545	SEQ_ID_NO_2	A4XMY1		2007-05-29	68.5%	70%	90.9%	33
98	SEQ_ID_NO_1	P34241		1993	66.7%	60%	90.9%	270
640	SEQ_ID_NO_2	P34241		1993	66.7%	60%	90.9%	280
4	SEQ_ID_NO_1	Q9C8T1		2000	66.7%	85.7%	63.6%	31
9	SEQ_ID_NO_1	Q9NKV0		2000	66.7%	54.5%	100%	52
544	SEQ_ID_NO_2	Q9C8T1		2000	66.7%	85.7%	63.6%	32
549	SEQ_ID_NO_2	Q9NKV0		2000	66.7%	54.5%	100%	54
8	SEQ_ID_NO_1	Q7TP90		2003-10-01	66.7%	66.7%	81.8%	41
548	SEQ_ID_NO_2	Q7TP90		2003-10-01	66.7%	66.7%	81.8%	43
10	SEQ_ID_NO_1	A0A0B4J1F4		2004	66.7%	66.7%	81.8%	58
550	SEQ_ID_NO_2	A0A0B4J1F4		2004	66.7%	66.7%	81.8%	60
53	SEQ_ID_NO_1	P34400		1990	64.8%	87.5%	72.7%	180
594	SEQ_ID_NO_2	P34400		1990	64.8%	87.5%	72.7%	190

Row	Query	Match	Publication	First published	Query Match	Identity	Query coverage	E-value
37	SEQ_ID_NO_1	Q05704		1991	64.8%	54.5%	100%	140

Case log

12 events; every event checks out. Each event's SHA-256 covers the event and the SHA-256 of the one before it, so a change to any event breaks the chain from there on. The table shows each SHA-256's first 12 characters, in the events' words too.

#	When (UTC)	By	Event	SHA-256
1	2026-11-21 21:54	ConductScience	Started the case “US 12788009 B2: Insect neuropeptides 2”.	`d03ebc5f8ac9`
2	2026-11-21 21:54	ConductScience	Imported 9 claims from US 12788009 B2 as set 1 (as granted, 2026-11-10). Claims SHA-256 0e4b460f97d5.	`bc945bc71323`
3	2026-11-21 21:54	ConductScience	The rules (version 1.3.0) found 3 features.	`c7d87bc47064`
4	2026-11-21 21:54	ConductScience	Read 410 paragraphs of the description from US 12788009 B2, 4 citing a SEQ ID NO. Specification SHA-256 96153adcdf7d.	`044ef40f613e`
5	2026-11-21 21:54	ConductScience	Set the application number to US 19/044,923, from US 12788009 B2.	`84787c2b7ffe`
6	2026-11-21 21:54	ConductScience	Set the prior art date to 2025-02-04 (filing date), from US 12788009 B2.	`9eab6836f9e6`
7	2026-11-21 21:54	ConductScience	Accepted F1 in claim 1 (Sequence): “AIMARPQVPRL”.	`1bf43c11da07`
8	2026-11-21 21:54	ConductScience	Accepted F2 in claim 1 (SEQ ID): “SEQ ID NO:1”.	`36abb135f5ed`
9	2026-11-21 21:54	ConductScience	Accepted F3 in claim 5 (SEQ ID): “SEQ ID NO: 2”.	`eb8558184484`
10	2026-11-21 21:54	ConductScience	Drafted the plan: 2 searches, 0 features not covered.	`ce297eeee83a`
11	2026-11-21 21:54	ConductScience	Locked plan version 1: 2 searches, 0 features not covered. Plan SHA-256 2db728bcddf3.	`1747459e391b`
12	2026-11-21 21:54	ConductScience	Ran P1 and P2 from plan version 1: 2 search jobs.	`1e1408af67ef`