

INTERNATIONAL SEARCH REPORT

International application No.

PCT/JP2022/019639

A. CLASSIFICATION OF SUBJECT MATTER

A01N 43/836(2006.01)i; **A01N 37/34**(2006.01)i; **A01N 37/50**(2006.01)i; **A01N 43/40**(2006.01)i; **A01N 43/42**(2006.01)i; **A01N 43/50**(2006.01)i; **A01N 43/54**(2006.01)i; **A01N 43/56**(2006.01)i; **A01N 43/653**(2006.01)i; **A01N 47/14**(2006.01)i; **A01N 47/24**(2006.01)i; **A01N 55/02**(2006.01)i; **A01P 3/00**(2006.01)i; **C07D 413/10**(2006.01)i; **C07D 413/14**(2006.01)i
 FI: A01N43/836; A01P3/00; A01N43/54 A; A01N43/42 101; A01N43/56 C; A01N43/653 G; A01N37/34 104; A01N43/50 M; A01N43/653 C; A01N43/50 K; A01N37/50; A01N43/40 101E; A01N47/24 G; A01N43/40 101J; A01N47/14 C; A01N55/02 160; C07D413/10; C07D413/14

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A01N43/836; A01N37/34; A01N37/50; A01N43/40; A01N43/42; A01N43/50; A01N43/54; A01N43/56; A01N43/653; A01N47/14; A01N47/24; A01N55/02; A01P3/00; C07D413/10; C07D413/14

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Published examined utility model applications of Japan 1922-1996
 Published unexamined utility model applications of Japan 1971-2022
 Registered utility model specifications of Japan 1996-2022
 Published registered utility model applications of Japan 1994-2022

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

Caplus/REGISTRY (STN)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	WO 2019/022061 A1 (NIPPON SODA CO., LTD.) 31 January 2019 (2019-01-31) claims, paragraphs [0140]-[0161], [0182]-[0200], tables	1-4
A	JP 2018-536025 A (BASF SE) 06 December 2018 (2018-12-06) claims, paragraphs [0222]-[0327]	1-4
P, A	WO 2021/251274 A1 (NIPPON SODA CO., LTD.) 16 December 2021 (2021-12-16) claims, examples	1-4

☐ Further documents are listed in the continuation of Box C.☒ See patent family annex.

* Special categories of cited documents:

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 “O” document referring to an oral disclosure, use, exhibition or other means
 “P” document published prior to the international filing date but later than the priority date claimed

“T” later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
 “X” document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
 “Y” document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
 “&” document member of the same patent family

Date of the actual completion of the international search

28 June 2022

Date of mailing of the international search report

12 July 2022

Name and mailing address of the ISA/JP

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INTERNATIONAL SEARCH REPORT
Information on patent family members

International application No.

PCT/JP2022/019639

Patent document cited in search report			Publication date (day/month/year)	Patent family member(s)	Publication date (day/month/year)
WO	2019/022061	A1	31 January 2019	EP 3660007 A1 claims, paragraphs [0110]-[0112], [0137] KR 10-2020-0033256 A CA 3069803 A CN 111094258 A BR 112020000992 A	
JP	2018-536025	A	06 December 2018	US 2018/0317491 A1 claims, paragraphs [0365]-[0475] WO 2017/076742 A1 EP 3370524 A1 CA 3002299 A KR 10-2018-0080286 A CN 108347935 A BR 112018008608 A	
WO	2021/251274	A1	16 December 2021	(Family: none)	