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Derwent Patent Search

Derwent Data

Feature spotlight

Access to full-text global coverage

Derwent has expanded the full text coverage to 75 authorities

We have expanded our datasets to 75 jurisdictions, including emerging geographic regions, in 2020. This content expansion includes:

- **Original language full text**, including for China, Korea, and Russia
- **Full-text English translations**, including for EUIPO, Canada, Germany, France, and WIPO
- **Searchable full-text PDFs**, including 18 new authorities
- **Interleaved view of patent sections** in Derwent Innovation, including claims and description
- DWPI extended backfile coverage, including 9 authorities in CIS countries
- Multiple drawings, including in Chinese patents

Derwent Data

Feature spotlight

Access to full-text global coverage

Global Patent Data

Argentina	Germany	PCT
Australia	India	Russia
Brazil	Indonesia	Singapore
Canada	Japan	Thailand
China	Korea	UK
EP	Malaysia	US
France	Mexico	Vietnam

Base

Addition

ARIPO (Africa)	**Estonia**	**Lithuania**	**Serbia**
Armenia	**Eurasia**	**Luxembourg**	**Slovakia**
Austria	**Finland**	**Moldova**	**Slovenia**
Belarus	**Georgia**	**Monaco**	**South Africa**
Belgium	**Greece**	**Mongolia**	**Soviet Union**
Bulgaria	**Gulf Cooperation**	**Morocco**	**Spain**
Colombia	**Holland**	**New Zealand**	**Sweden**
Costa Rica	**Hong Kong**	**Norway**	**Switzerland**
Croatia	**Hungary**	**OAPI (Africa)**	**Taiwan**
Cuba	**Iceland**	**Philippines**	**Tunisia**
Czech Republic	**Ireland**	**Poland**	**Turkey**
Czechoslovakia	**Israel**	**Portugal**	**Ukraine**
Denmark	**Italy**	**Romania**	**Uruguay**
East Germany	**Latvia**		

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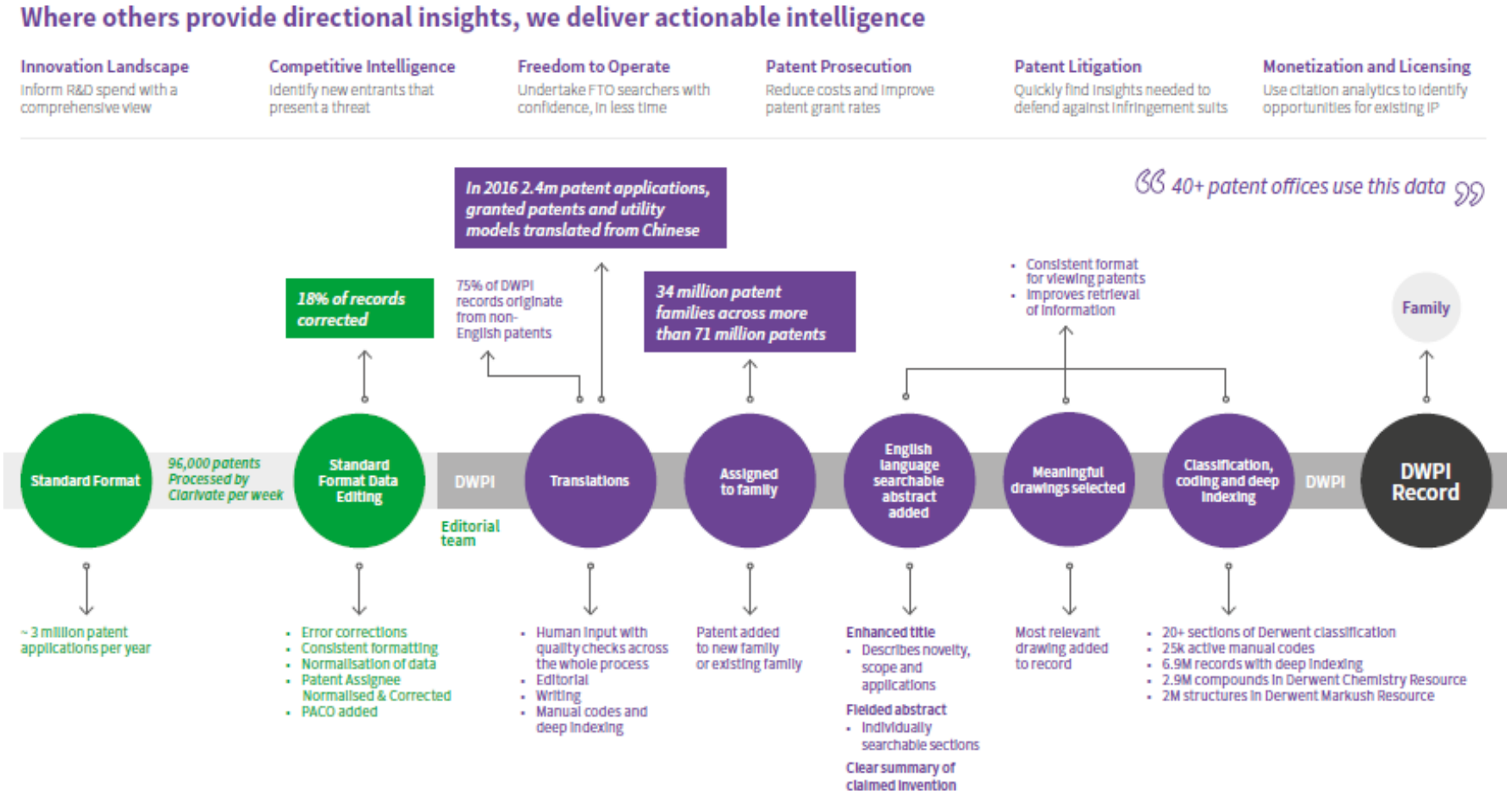
Derwent World Patents Index (DWPI)

DWPI is the world's most trusted source of patent information

Team of 900+ expert scientists, engineers and editors take every raw patent document and convert into a DWPI record



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Derwent World Patents Index (DWPI)

What makes DWPI different?

- Enhanced titles
- Comprehensive abstracts
  - Novelty
  - Use
  - Advantage
- Error-corrected bibliographic information
- Editorially enhanced and accurate data
- Global coverage in English

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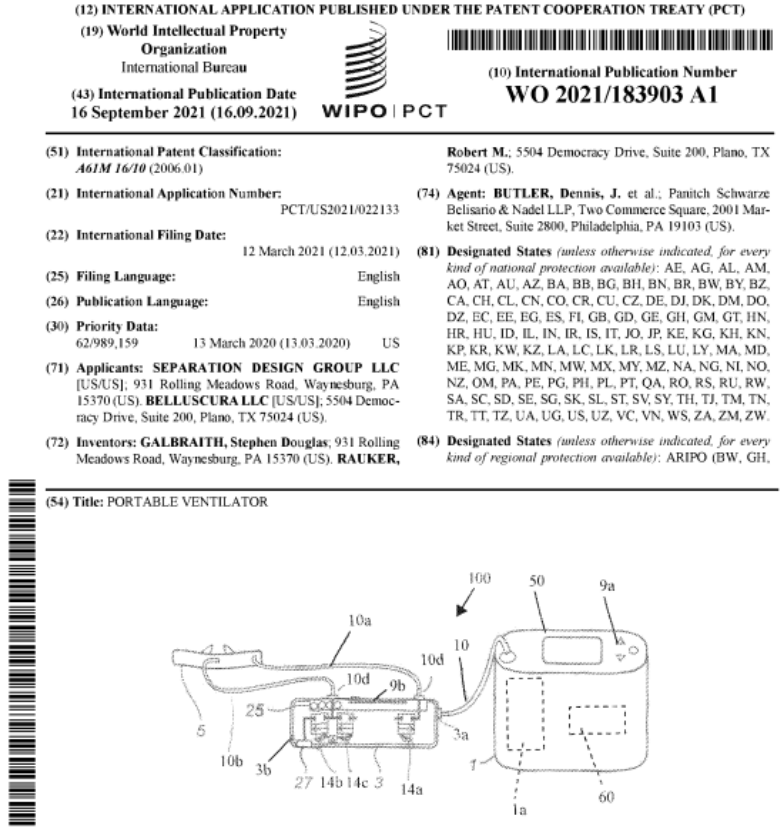
WO2021183903A1



(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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International Bureau

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WIPO | PCT

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62/989,159 13 March 2020 (13.03.2020) US

(71) Applicants: **SEPARATION DESIGN GROUP LLC** [US/US]; 931 Rolling Meadows Road, Waynesburg, PA 15370 (US). **BELLUSCURA LLC** [US/US]; 5504 Democracy Drive, Suite 200, Plano, TX 75024 (US).

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(74) Agent: **BUTLER, Dennis, J.** et al.; Panitch Schwarze Belisario & Nadel LLP, Two Commerce Square, 2001 Market Street, Suite 2800, Philadelphia, PA 19103 (US).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, IT, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH,

(54) Title: PORTABLE VENTILATOR

Original Patent Title

PORTABLE VENTILATOR

DWPI title

Portable oxygen delivery system for treating chronic obstructive pulmonary disease, has power source attached to housing, and oxygen controller device electronically controlling pressure swing adsorption process

Novelty

The oxygen delivery system (100) has a housing (50) of an oxygen concentrator (1). A compressor (60) is mounted inside the housing. A sieve module is located within the housing and in fluid connection with the compressor. The sieve module contains a zeolite for removing nitrogen from air through a pressure swing adsorption process for creating concentrated oxygen. A power source is attached to the housing. A controller device electronically controls the pressure swing adsorption process. A blowing apparatus (3) is in fluid communication with the oxygen concentrator. The blowing apparatus comprises a blower housing (3b). A blower motor is mounted inside the blower housing. A blower fan is connected to the blower motor. A second power source (27) is attached to the blower housing. A blower controller device (9b) electronically controls the blowing apparatus.

Use

Portable oxygen delivery system for use by patient with breathing ailment i.e. chronic obstructive pulmonary disease (COPD), and lung disorder.

Advantage

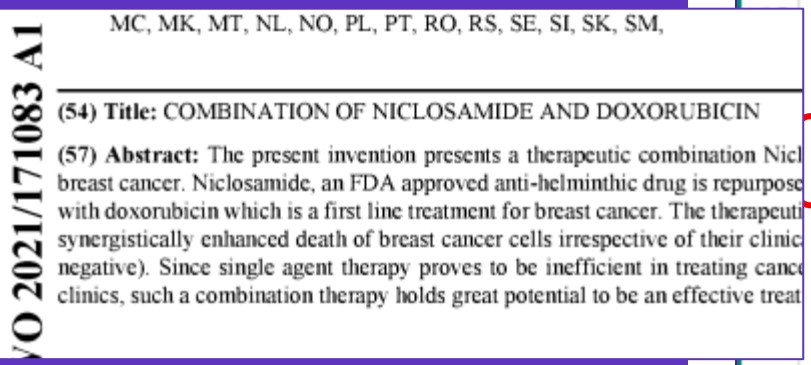
The system is scalable and configurable to decrease the weight and cost of the device to the patient, as their disease progresses, or oxygen needs change due to exercise or environment and more…

Prior Art Searches on DWPI- Patent +Non-Patent- A sample

Feature 1

Claim #1

A method of treating cancer comprising administering to an individual in need thereof an effective amount of econazole, sulconazole, isoconazole, miconazole, sertaconazole, tioconazole, fenticonazole, liarozole, cloconazole, itraconazole, niclosamide, deferasirox, eltrombopag, or a pharmaceutically acceptable salt, solvate, or combination thereof.



MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) **Title:** COMBINATION OF NICLOSAMIDE AND DOXORUBICIN

(57) **Abstract:** The present invention presents a therapeutic combination Nicl breast cancer. Niclosamide, an FDA approved anti-helminthic drug is repurpose with doxorubicin which is a first line treatment for breast cancer. The therapeuti synergistically enhanced death of breast cancer cells irrespective of their clinic negative). Since single agent therapy proves to be inefficient in treating cance clinics, such a combination therapy holds great potential to be an effective treat

O 2021/171083 A1

The method of claim 1, provided that the cancer comprises colon cancer, pancreatic cancer, cutaneous T-cell lymphoma, glioma, head and neck cancer, hepatocarcinoma, leukemia, glioblastoma, colorectal cancer, gallbladder, mastocytoma, acute myeloid leukemia, adrenocortical cancer, bladder urothelial cancer, brain tumor, brain lower grade glioma, breast cancer, breast invasive cancer, cervical cancer, cholangiocarcinoma, cutaneous melanoma, diffuse large B-cell lymphoma, endometrial cancer, glioblastoma multiform, H&N squamous cell carcinoma, hepatocellular carcinoma, kidney chromophobe carcinoma, lung cancer, lung adenocarcinoma, lung squamous cell carcinoma, mesothelioma, ovarian serous cystadenocarcinoma, pancreatic ad
prostate adenocarcinoma, prostate
cancer, renal papillary cell cancer, sa
uterine carcinosarcoma, melanoma,

Feature 1

1 Niclosamide Suppresses Cancer Cell Growth By Inducing Wnt Co-Receptor LRP6 Degradation and Inhibiting the Wnt/beta-Catenin Pathway

Lu, WY; Lin, CH; (...); Li, YH

Dec 16 2011 | PLOS ONE 6 (12)

Combination of 2 drugs- Niclosamide plus doxorubicin for Breast Cancer

13 The method of claim 1, provided that the effective amount is from about 5 mg to about 5,000 mg.

14 The method of claim 1, provided that the individual is administered an additional active agent comprising a PD-1/PD-L pathway inhibitor, IDO inhibitor, TDO inhibitor, CTLA-4 inhibitor, or a combination thereof; or provided that the individual is administered an additional active agent as part of an immunotherapy, CAR T cell therapy, stem cell therapy, or a combination thereof.

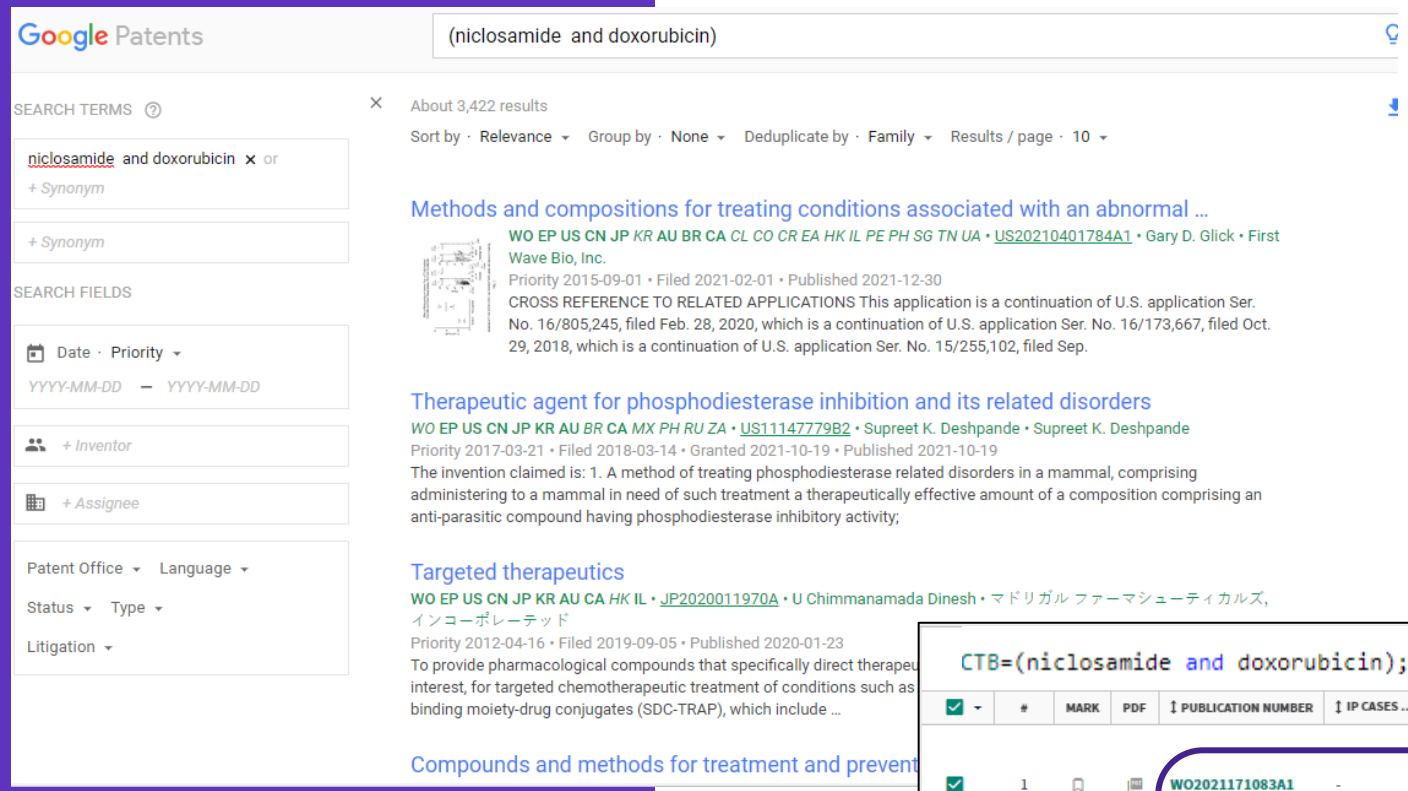
Feature 2

1 Doxorubicin inhibits PD-L1 expression by enhancing UP-mediated decay of PD-L1 mRNA in cancer cells

Kim, DJ; Jang, JH; (...); Cho, WJ

Feb 5 2020 | BIOCHEMICAL AND BIOPHYSICAL RESEARCH COMMUNICATIONS 522 (2) , pp.402-407

Non Patent Literature Search linked to Web of Science



Same search string- Google Patents provides random results- Derwent Innovation fetches precise result set with the right patent at top.

CTB=(niclosamide and doxorubicin);

Highlighting

#	MARK	PDF	PUBLICATION NUMBER	IP CASES ...	ASSIGNEE/APPLICANT	PUBLICATION DATE	TITLE	CURRENT I...	RELEVANCY	OPTIMIZED ASSIGNEE	PRIORITY
1			WO2021171083A1	-	INDIAN INSTITUTE OF TECH KANPUR	2021-09-02	COMBINATION OF NICLOSAMIDE AND DOXORUBICIN	A61K 31/04	71	INDIAN INSTITUTE OF TECHNOLOGY - KANPUR	IN
2			IN202011008213A	-	INDIAN INSTITUTE OF TECHNOLOGY KANPUR	2020-03-06	COMBINATION OF NICLOSAMIDE AND DOXORUBICIN	A61K 45/06	67	INDIAN INSTITUTE OF TECHNOLOGY - KANPUR	IN
3			IN202011033005A	-	INDIAN INSTITUTE OF TECHNOLOGY KANPUR	2020-09-04	NANOPARTICLE-BASED DRUG DELIVERY SYSTEM FOR NICLOSAMIDE AND A COMBINATION THEREOF		39	INDIAN INSTITUTE OF TECHNOLOGY - KANPUR	IN
4			IN373162B	-	INDIAN INSTITUTE OF TECHNOLOGY KANPUR	2021-08-06	NANOPARTICLE-BASED DRUG DELIVERY SYSTEM FOR NICLOSAMIDE AND A COMBINATION THEREOF		39	INDIAN INSTITUTE OF TECHNOLOGY - KANPUR	IN
5			CN108815148A	-	UNIV HARBIN MEDICAL	2018-11-16	Application of niclosamide and structural trim thereof in heart protection, pulmonary hypertension resistance and tumor resistance	A61K 31/167	38	UNIV HARBIN MEDICAL	CN
6			CN108815148B	-	Harbin Medical University	2021-04-20	Application of niclosamide and structure modification thereof in heart protection, anti-pulmonary hypertension and anti-tumour	A61K 31/167	31	UNIV HARBIN MEDICAL	CN
7			WO2008123266A1	-	REVERSE PROTEOMICS RES INST CO	2008-10-16	TARGET PROTEIN AND TARGET GENE FOR DRUG DISCOVERY, AND SCREENING METHOD	C12Q 1/68	17	REVERSE PROTEOMICS RES INST CO LTD	JP

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Design complex queries using International Patent Classification (IPC) codes, publication year/priority year/priority date/application country etc.)

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CTB=((Enzym* NEAR7 hydroly*) AND ("waste paper" or cellulose or lignin or biomass or "plant matter") AND (bioethanol or biobutanol or biolalcohol or fuel or ethanol)) AND IC=(C12P) AND PY>=(2017) AND PY<=(2022) AND CTB=(bioethanol or biofuel or bioalcohol or biobutanol);
```

1,934 Individual records | 845 DWPI families | 940 INPADOC families | 1,664 application numbers

See patent family information

Filters

See if any associated litigation is there

Highlighting | Manage columns | Advanced sort

#	MA...	PDF	PUBLICATION NUMB...	IP CASES ...	ASSIGNEE/APPLICA...	PUBLICATION DA...	TITLE	CURRENT I...	RELEVAN...	OPTIMIZED ASSIGN...	PRIORITY COUNTRY/REGION EARLIEST-D...	COUNT OF
1			EP4010527A1	-	AMERICAN PROCESS INT LLC	2022-06-15	PROCESS FOR THE PRODUCTION OF CELLULOSE, LIGNOCELLULOSIC SUGARS, LIGNOSULFONATE, AND ETHANOL	D21C 1/02	207	-	US	0
2			EP3401322B1	-	VIRDIA LLC	2022-06-08	LIGNOCELLULOSE CONVERSION PROCESSES AND PRODUCTS	C07G 1/00	19	-	US	0
3			CN111304262B	-	Qilu University of Technology	2022-05-27	Pre-treatment method for promoting efficient utilization of biomass	C12P 7/10	46	-	CN	0
4			EP3230463B1	-	SWEETWATER ENERGY INC	2022-05-25	RAPID PRETREATMENT	C12P 19/02	102	SWEETWATER ENERGY INC	US	0
5			EP4001419A1	-	DSM IP ASSETS BV	2022-05-25	PROCESS FOR ENZYMATIC HYDROLYSIS OF LIGNOCELLULOSIC MATERIAL AND FERMENTATION OF SUGARS	C12P 7/06	49	ROYAL DSM NV	EP	0
6			US11337442B2	-	ROQUETTE FRERES	2022-05-24	Method for the valorisation of yeast biomass resulting from the production of ethanol	A23K 10/38	14	ROQUETTE GROUP	FR	0
7			AU2020374934A1	-	NANJING LETOP BIOTECHNOLOGY CO LTD	2022-05-19	Low molecular weight chondroitin sulfate, composition containing same, and preparation method therefor and use thereof	C12P 19/14	39	NANJING LETOP BIOTECHNOLOGY CO., LTD.	WO	0

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Smart Search

Smart Search significantly reduces the time taken to get to relevant results for any patent activity

1. Take any block of text that describes what you are looking for :
   - ❑ **Product Description from a website**
   - ❑ **Invention Disclosure**
   - ❑ **Claims from a Patent**

2. The algorithm will use the "Smart Themes" *(converted from the text)*

3. Results are returned in relevance ranked order

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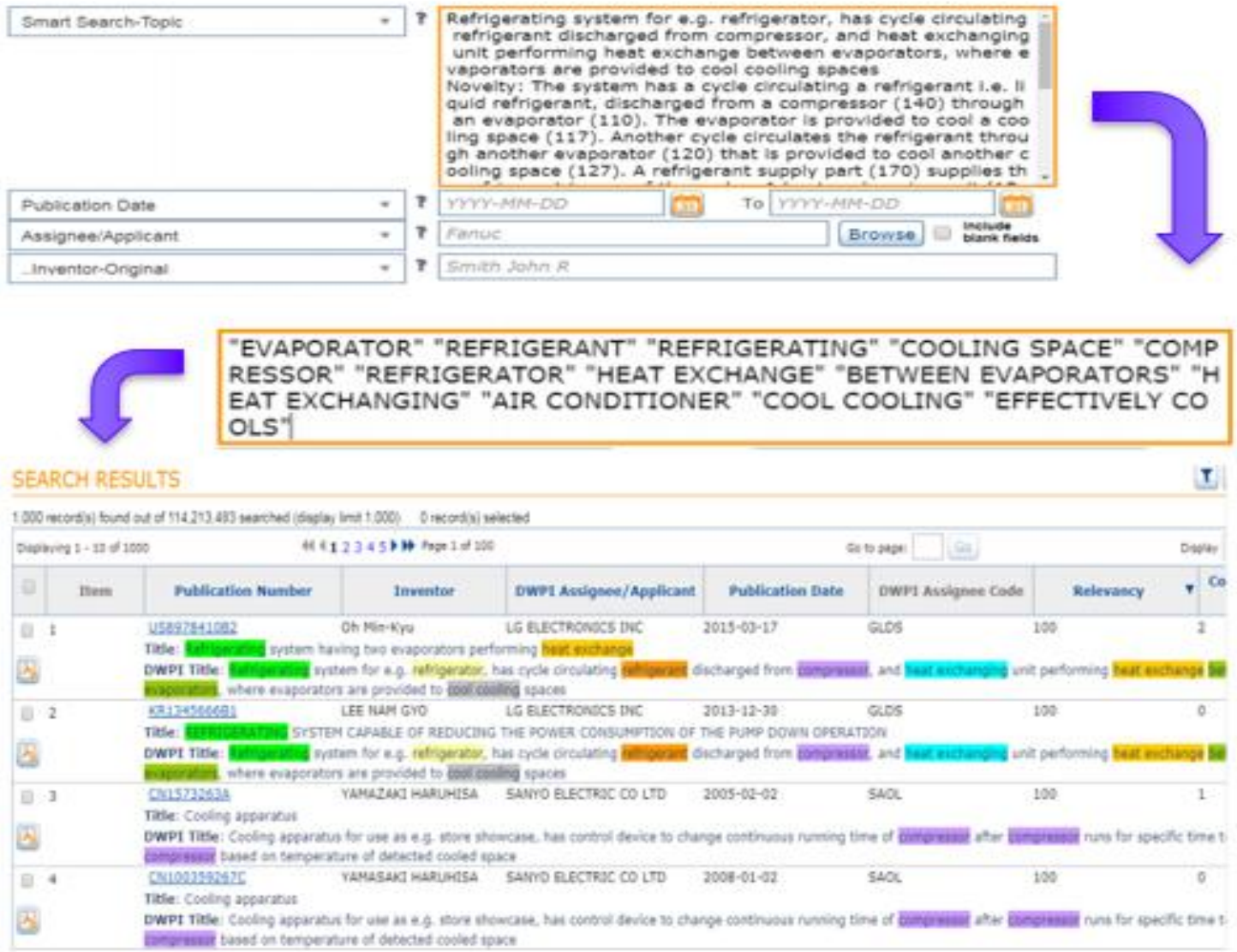

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1. Who are the major players?
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3. How is the technology trending?
4. What are my competitors working on?
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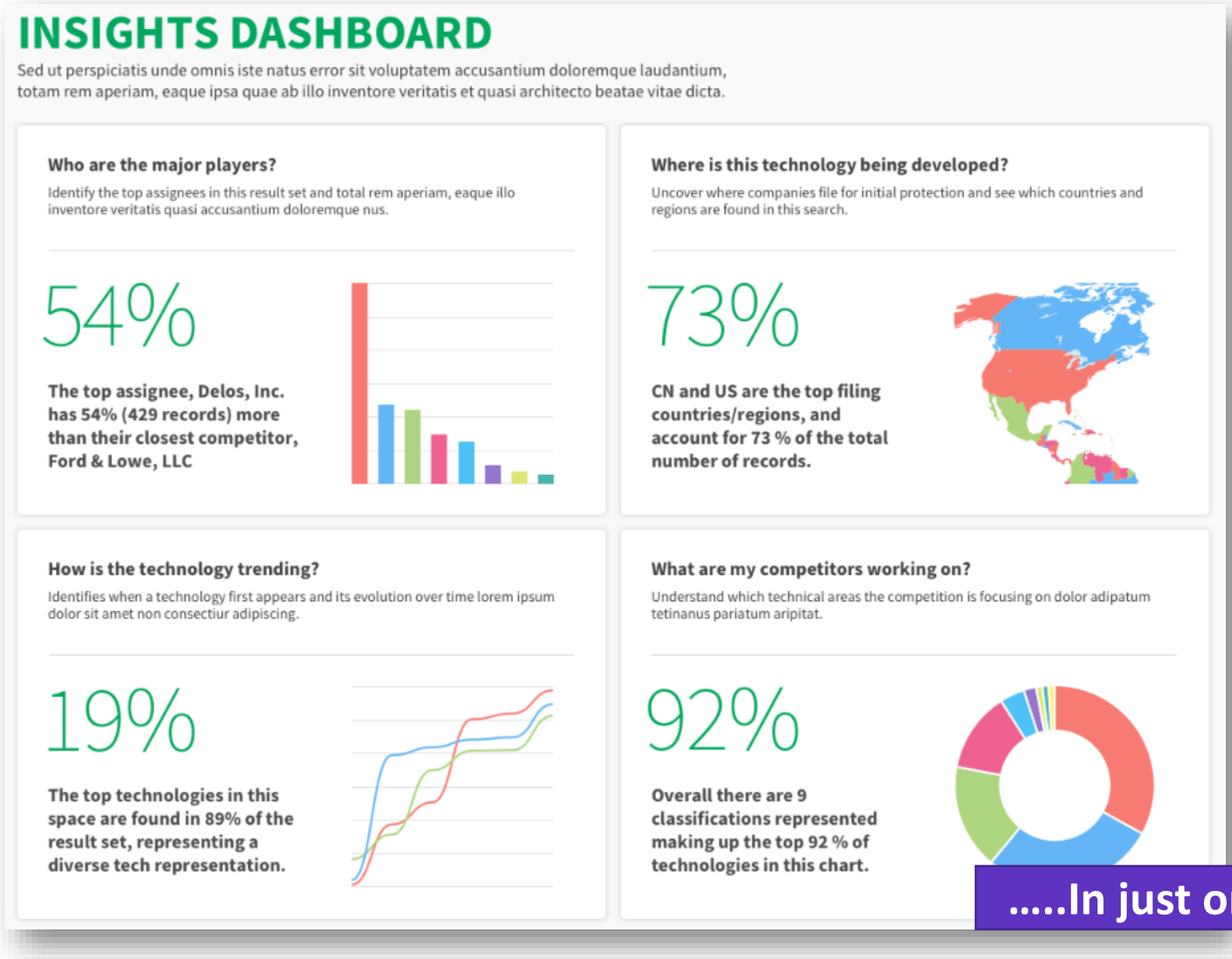
In Just one Click



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DPCI is the only editorially enhanced database available focusing on patent citations – **Making it easy to find closely related patents**

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- All citations are verified for accuracy, ensuring complete citation coverage at the invention level
- These citations cross disciplines to include all technologies and citations, **including citations from examiners, inventors, oppositions, and third parties**

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Professional Access

US20060216222A1

Collapse DPCI Citing Patents

	Publication number	Accession Number	Publication date	Application date	DWPI Family Member(s)	Relevance	Source
	CN100586848C	2008-M35316	2010-02-03	2008-01-22	US20060216222A1	-	0 (Examiner)
	DWPI title: Preparation of conductive single-layer graphite sheet with ion liquid cation radical decoration by using water ion liquid and graphite stick as electrode electrolyzing and obtaining the sheet-shaped single-layer graphite sheets **DWPI Assignee/Applicant:** UNIV NORTHEAST NORMAL (UYNO-C); UNIV DONGBEI NORMAL (UYDO-N) **DWPI Inventor:** LIU N; LUO F						
	CN102259849A	2011-Q39327	2011-11-30	2011-06-09	US20060216222A1	-	0 (Examiner)
	DWPI title: Preparation of graphene with solid carbon source involves spraying organic polymer on metal substrate heating substrate spraying solid carbon source filling protection gas heating and maintaining highest temperature and air flow **DWPI Assignee/Applicant:** WUXI DILIUYUANSU HI-TECH DEV CO LTD (WUXI-N); WUXI SIXTH ELEMENT HI-TECH DEV CO LTD (WUXI-N) **DWPI Inventor:** QU Y						
	CN103889897A	2013-C57399	2014-06-25	2012-08-13	US20060216222A1	A	0 (Examiner)
	DWPI title: Making architectural construct e.g. to build microcircuit involves dehydrogenating hydrocarbon by applying heat through substrate to deposit carbon onto substrate forming layers of matrix characterization of carbon derived from hydrocarbon						

Collapse DPCI Citation Counts

DPCI Citations	Total	Examiner	Inventor	Opposition	3rd party	Undefined
Citing Patents	79	58	21	0	0	0
Cited Patents	13	13	0	0	0	0
Citing Authorities	3	3	2	0	0	0
Cited Authorities	1	1	0	0	0	0
Citing Accession Numbers	58	39	20	0	0	0
Cited Accession Numbers	11	11	0	0	0	0
Cited Non-patents	2	2	0	0	0	0

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