

IRWIN IP

INTELLECTUAL PROPERTY LITIGATION

Patent Searching – Strategies and Best Practices

mHUB

October 28, 2025

Disclaimer



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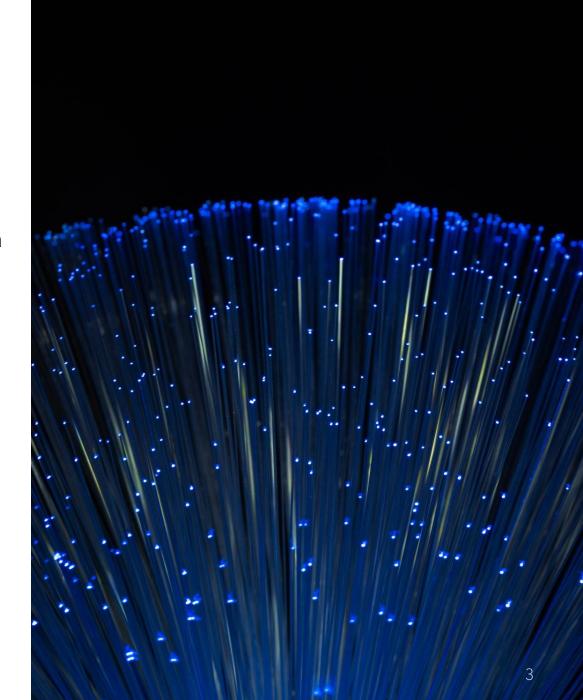
Searching Tips

Demo

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01

Who We Are



Practical Counsel.
Powerful Impact.
Two Midwest firms
merging to serve clients
worldwide.

For more info:

https://millerjohnson.com/ https://irwinip.com

Check us out on LinkedIn, Facebook, and Instagram



Meet IIP Attorneys

- 18 years of experience
- Litigates IP disputes throughout the country in a variety of venues
- Broad range of clientele: automobile, pharma, tech, consumer product, and medical device companies; photographers, musicians, authors, toy and game inventors, and other creatives





- First year IP associate
- Assists in patent litigation, trademark, and copyright cases







02

Patent Basics

Patents: Overview and Examples



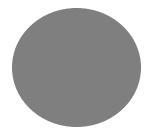
Type of IP	Definitions	Examples	Term	Cost
Patent (Utility)	New and useful ideas and improvements thereof	Household items, semiconductors, medical devices	20 years from date of filing of patent application	\$\$\$\$
Patent (Design)	New ornamental (non- functional) designs	Shape of furniture, fabric patterns, mobile phone interface	15 years from date of grant	\$\$\$

Patents: Definitions



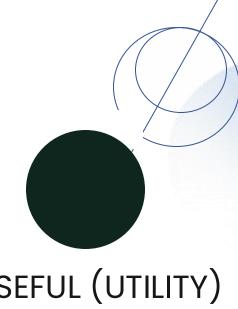
NEW (NOVEL)

Has anyone else in the "prior art" already done exactly what you invented?



NOT OBVIOUS (INVOLVES AN INVENTIVE STEP)

Has someone else in the "prior art" done something close to what you invented, and would it be obvious to modify what they did to arrive at your invention?

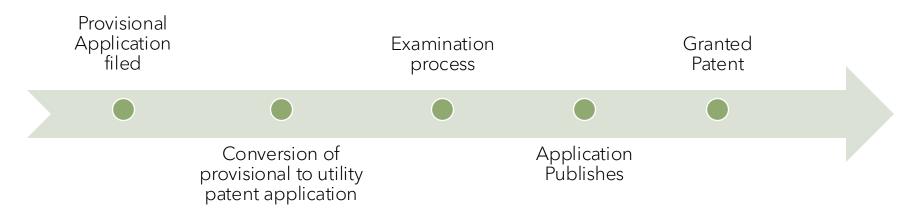


USEFUL (UTILITY)

Very low threshold. Essentially, if your invention can do anything more than serve as a paperweight, it probably will meet the utility requirement.

Patents: Common Mistakes

- Not conducting a prior art search
- Inadequate patent description
- Poorly drafted patent claims (to be or not to be [your own lexicographer])
- Disclosing the invention, method, or process to the public too early
- Waiting too late to file the patent application before a competitor
- Not renewing the patent in time and ignoring maintenance fees



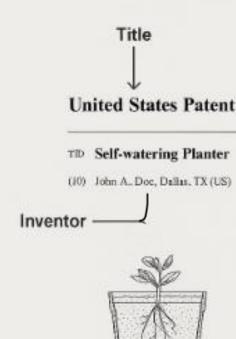


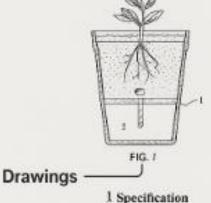
What does a patent look like?

Claims= the fence around the around the property (scope of the legal protection)

Specifications = the blueprint explaining what's inside and how it works







DETAILED DESCRIPTION OF THE INVENTION

DETERLED DESCRIPTION OF THE INVENTION

1. In tris he construit the inscreeings a continuum for holding set and a place is base for holding seater and a sook exending from the contribution the base. The witch to match of a certonal flaid allow water to for estain by captilery action "Iwin the base into the cost in the continue." The base the a transport section to permit visual impection of the water level.





Appl. No: 00/123,456

iled: Jan. 11, 1999

Patent Information

ABSTRACT

A soff-watering planter includes a dontaser for holding soil soil a plant I owns for holding carnies and a work recording from the selftumin into the base. The soik to make of a maturns that allowe water to be moved by captillary action from the base also set soil in the consoling. The base has a correspond socious to plante a real impection of the water level.

Specification

1 SPECIFICATION

DETAILED DESCRIPTION OF THE INVENTION

2 Claims

b. A self-watering planter of claim 1 in which the base has a transpectal a section to permit visual inspection of the water level.

Claims

 The soff-watering planter of claim t in which the base has a transperent section to permit visual inspection of the water level.



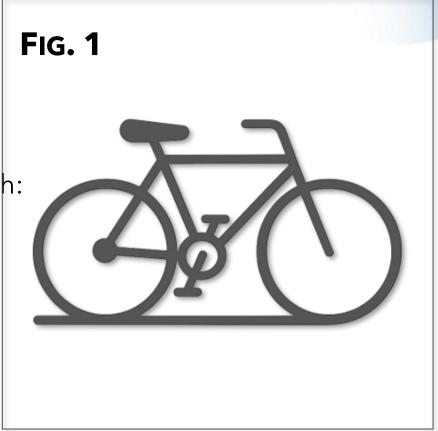
Patent Invalidity - Novel Anticipation/Obviousness



I CLAIM...

A cycling vehicle with:

- a wheel,
- pedals, and
- a seat.

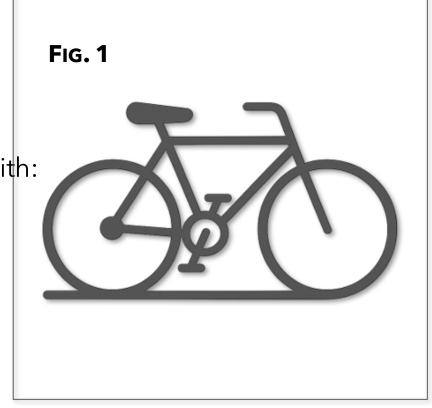


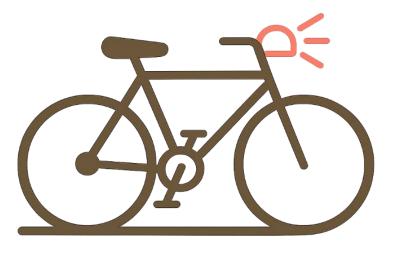
Patent Infringement

I CLAIM...

A cycling vehicle with:

- a wheel,
- pedals,
- a seat, and
- handlebars.







03

Why Conduct a Patent Search

Why Patent Searches?

- Offensive Uses Protecting and Defending your Turf
 - Identify Competitors to Target (or Avoid)
 - Identify Competing/Infringing Technologies
 - Assess Patentability of Inventions
 - Hone Patent Applications and Claim Scope
 - o Challenge Competitor Patents (e.g., IPR, DJ)
- Defensive Uses Avoiding Unnecessary Battles
 - Look For Prior Art to Blocking Patents (e.g., C&D letter)
 - Determine Viability of Technology and/or Business Strategies
 - Research Market Trends (Emerging Tech? Competitor Focus?
 White Spaces?)

Reasons to Conduct Patent Research

Туре	Purpose	When it Might Happen
Patent Landscape / State-of-the-Art	To understand technology trends, competitors, and white space opportunities in a field	During market research or early stages of R&D planning
Novelty (Prior Art) Search	To see if your own invention is new before filing a patent	Before filing a patent application
Freedom to Operate Search	To ensure your product does not infringe existing, active patents	Before launching or selling a product
Invalidation Search	To determine whether someone else's patent is valid or whether it can be invalidated	After receiving a cease-and-desist letter

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Scenario 1: Patent Landscape Search

Priya runs a sustainable packaging startup and wants to explore biodegradable plastic alternatives. Before investing in R&D, she commissions a **patent landscape search** to understand the field.

The search, covering IPC classes C08L (compositions of macromolecular compounds) and B65D (containers for storage or transport), reveals that Japan and Germany dominate in bioplastic coatings, while very few patents focus on seaweed-based polymers.

Priya identifies a **white space** – biodegradable films derived from seaweed – and decides to focus her innovation there. Within a year, she files her own patents in that niche.

Takeaway: Landscape searches provide a strategic overview of a technology area and can highlight trends, gaps, and opportunities for innovation and investment.



Scenario 2: Novelty/Prior Art Search

Maria, a biomedical engineer, invents a **smart water bottle** that tracks hydration levels using embedded sensors on the outside of the bottle.

Before spending thousands on an application, she decides to conduct a **novelty (prior art) search**. Using Google Patents. she searches for similar inventions under IPC codes like A47G 19/22 (containers for drinking).

She discovers several patents for smart bottles that measure liquid volume and track hydration, but none that track hydration through skin conductivity. This confirms her idea may be patentable with the right claim focus, and she refines her patent application accordingly.



Takeaway: Novelty searches can help inventors confirm originality, refine their claims, and save money by avoiding applications that will likely be rejected.

Scenario 3: Freedom to Operate Search

John's startup is ready to launch an **electric skateboard** with regenerative braking. Before going to market, his investor asks, "Are we sure we're not infringing on anyone's patent?"

John commissions a **freedom to operate (FTO)** search, focusing on active patents in the U.S. related to electric braking and motor control (B60L 15/20).

He finds that a large manufacturer, Boosted Inc., holds a patent that covers the exact motor control circuitry he's using. With this information, Jordan's team modifies the circuit design to avoid infringement and considers reaching out to Boosted for a **licensing discussion**.



Takeaway: An FTO search protects entrepreneurs from lawsuits, delays, and expensive redesigns by ensuring their product doesn't infringe on existing, active patents.

Scenario 4: Validity Search

Ethan, founder of *GrowlQ*, launches a **smart soil sensor** that tracks moisture and nutrients. Months later, he receives a **cease-and-desist letter** from *AgriTech Solutions*, claiming infringement of their patent on "wireless soil monitoring and detection."

Instead of backing down, Ethan asks his attorney to conduct a **prior art (validity) search**. They discover an **earlier patent** describing the same technology, years before AgriTech's filing date.

Using that prior art, Ethan's legal team challenges AgriTech's patent, and the USPTO **invalidates the key claims** and *GrowlQ* continues selling its product freely.



Takeaway: A validity search can turn the tables—showing that a threatening patent isn't valid after all and protecting a startup's right to operate.



04

Where to Conduct a Patent Search

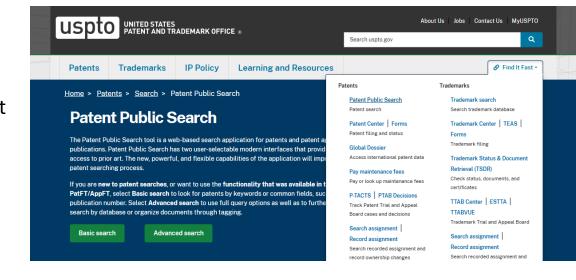
Databases-U.S.

- Google Patents
 - US patents in pdf format from 1790 to the present
 - https://patents.google.com/



Search and read the full text of patents from around the world.

- United States Patent and Trademark Office (USPTO)
 Patent Public Search
 - US patents from 1790, full-text available from 1976 to the present
 - https://www.uspto.gov/patents/search/patent-public-search



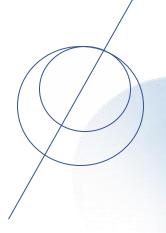
Databases-U.S.



- Resource for Google Patents
 - <u>Search Guide</u> https://support.google.com/faqs/answer/7049475?hl=en
- Resources for USPTO Patent Public Search
 - Searchable Indexes https://www.uspto.gov/patents/search/patent-public-search/searchable-indexes
 - Tutorial Videos https://www.uspto.gov/patents/training/patent-public-search-tutorial-videos
 - Novelty Search PPT https://www.uspto.gov/sites/default/files/documents/Basics-of-Prior-Art-Searching.pdf
 - Strategic Guide https://www.uspto.gov/video/cbt/prelim-patent-search/index.html

Databases-International

- World Intellectual Property Organization (WIPO) Patent scope
 - User Guide https://www.wipo.int/documents/d/patentscope/docs-en-patentscope_user_guide.pdf
- European Patent Office (EPO) Espacenet
- Japanese Patent Office (JPO) J-PlatPat
- Korean Intellectual Property Office (KIPO) KIPRIS
- The Lens
 - User Guide https://support.lens.org/article-categories/patent/







05

Effective Searching Tips

Tips: Brainstorm Key Words



- What is the purpose of the invention?
- What is the invention made of?
- How is the invention used?
- What are the technical terms of the invention?

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Tips: Operators/Boolean



- Group together synonyms using parentheses and "OR" (car OR automobile)
- Use truncation symbols \$ (bottle\$) to get singular and plural versions of the word
- AND: Retrieves patents containing all specified terms. For example, "solar AND panel" will return patents that mention both "solar" and "panel."
- OR: Retrieves patents containing at least one of the specified terms. For example, "battery OR capacitor" will broaden your search to include patents mentioning either "battery" or "capacitor."
- NOT: Excludes patents containing a specific term. For example, "smartphone NOT tablet" will exclude results that mention "tablet."

Tips: Classification Codes (CPC)



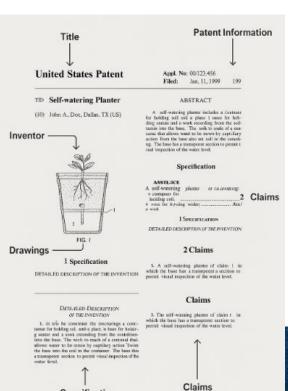


Section	Description	
Α	Human Necessities (e.g., medical or agricultural innovations)	
В	Performing Operations; Transporting (e.g., vehicles, manufacturing processes)	
С	Chemistry; Metallurgy (e.g., chemical compositions, metal alloys)	
D	Textiles; Paper (e.g., fiber processing, papermaking)	
Е	Fixed Constructions (e.g., building, civil engineering)	
F	Mechanical Engineering; Lighting; Heating; Weapons; Blasting	
G	Physics (e.g., measuring instruments, computing, optics)	
Н	Electricity (e.g., electrical components, telecommunications)	

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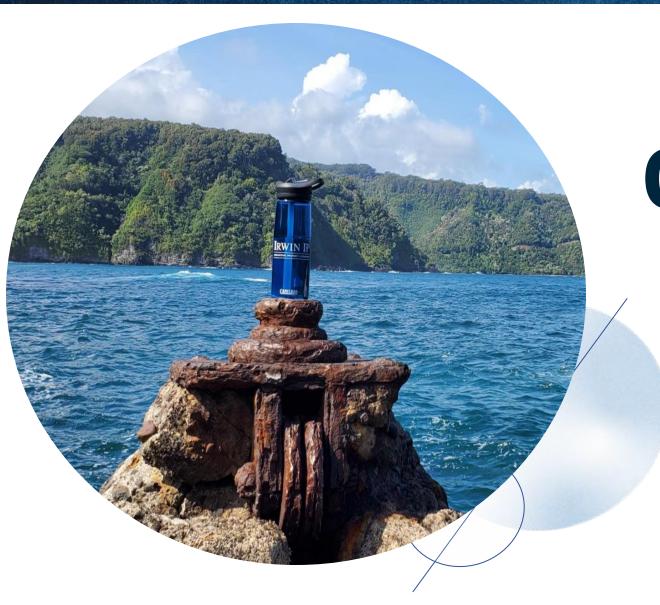
Tips: Searchable Indices





Specification

Index (Alias)	Descriptive Name	Example
PN	Patent or Published Patent Application Number	6000000.PN. or 20180093696.PN. — use the .pn. suffix.
PD	Patent Issue Date	YYYYMMDD (e.g., 20210603.PD.)
AD	Application Filing Date	YYYYMMDD.AD. (e.g., 20110111.AD.)
TI (TTL)	Invention Title	Searches the title of the patent/publication. Example: molecular.TI.
IN	Inventor Name	Doe.IN. or (Smith NEAR2 John).IN.
AS	Assignee Name	Goodyear.AS. — searches the assignee/organization name.
CPC	Cooperative Patent Classification	C12N7/00.CPC. — classification code.
АВ	Abstract text	Searches the abstract section of the document. Example: method.AB.



06

Demo

Self-watering planter Landscape Search

Search Terms

 ("self watering" or "automatic watering" or "automatic irrigation") AND planter OR pot

CPC Filter

A01G 9/02 (flower pots)



Step 1



("self watering" or "automatic watering" or "automatic $Q \ \ \, \implies \ \, \mp \ \,$

Include non-patent literature (Google Scholar)

Q

32

Search and read the full text of patents from around the world.

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("self watering" or "automatic watering" or "automatic irrigation") and (planter or pot)





("self watering" or "automatic watering" or "automatic irrigation") (planter or pot);

About 21 results

Sort by · Relevance · Group by · None · Deduplicate by · Family · Results / page · 10 ·



Self-irrigation system for multiple potted plants

WO EP US CN JP AU BR CA MX · CN105899069B · 小唐纳德.J.斯图尔特 · 小唐纳德.J.斯图尔特

Priority 2013-11-18 • Filed 2014-10-31 • Granted 2019-09-17 • Published 2019-09-17

Multiple secondary containers, the multiple secondary containers are each located at different elevations and include: Second level shell; Second level on the inside of the second level shell stores basin, and there is the second level storage basin upper part and its center to be located at The ...

A **self watering** flowerpot



KR • KR102377902B1 • 김흥기 • 김흥기

Priority 2019-01-10 • Filed 2019-01-10 • Granted 2022-03-24 • Published 2022-03-24

a partition plate 2 provided in a horizontal direction in the middle of the inner side of the flowerpot 1; a planting part (3) formed on the inner upper part of the pot (1) by the partition plate (2) to put soil and plants or plants; a water storage unit (4) formed on the lower inner side of the ...

Moisture sensitive irrigation control system



US • US5351437A • Fred W. Lishman • Lishman Fred W



Priority 1992-05-12 • Filed 1992-05-12 • Granted 1994-10-04 • Published 1994-10-04

15. The moisture sensitive irrigation system according to claim 14, wherein said means for irrigating comprises a manual shut-off valve mounted in said water tower and coupled between said valve and said supply of water, and flexible tubing coupling said manual shut-off valve to said valve, and ...

Pot for indoor plants with water container

• RU224226U1 • Александр Владиславович Казанцев • Александр Владиславович Казанцев

Filed 2023-07-20 • Granted 2024-03-19 • Published 2024-03-19

A pot for indoor plants with a water container, consisting of two communicating vessels, which represent a container for the plant and a container for filling water, characterized in that the container for the plant is made smaller in size with the possibility of coaxial placement in the water ...

Automatic water-feeding pot



KR · KR102653506B1 · 김준일 · 김준일

Priority 2023-05-03 • Filed 2023-05-03 • Granted 2024-03-29 • Published 2024-03-29

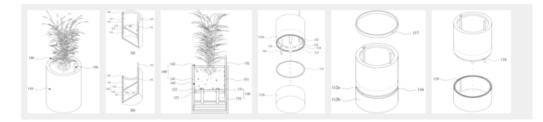
An automatic irrigation flowerpot comprises: a flowerpot main body which accommodates water in a lower main body and provides the water to culture soil; a support part which is composed of a support end and a support plate; a water supply part which is composed of a core material and a stopper; a ...

Automatic water-feeding pot

Abstract

An automatic irrigation flowerpot comprises: a flowerpot main body which accommodates water in a lower main body and provides the water to culture soil; a support part which is composed of a support end and a support plate; a water supply part which is composed of a core material and a stopper; a water input part which is composed of a water supply pipe and a stopper; and a water level identification part which is vertically extended from the upper main body to the lower main body on the other side of the edge of the flowerpot main body. The present invention may accurately identify the remaining amount through the scale displayed on the float so that the corresponding amount is not overflowed through the water input unit.

Images (6)



Classifications

■ A01G27/005 Reservoirs connected to flower-pots through conduits

View 2 more classifications

Landscapes

Life Sciences & Earth Sciences

Environmental Sciences



Q

KR102653506B1

South Korea



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☐ Find Prior Art ∑ Similar



Other languages: Korean

Inventor: 김준일

Worldwide applications

2023 · KR

Application KR1020230057654A events 3

2023-05-03 • Application filed by 김준일

2023-05-03 • Priority to KR1020230057654A

2024-03-29 • Application granted

2024-03-29 • Publication of KR102653506B1

 Active Status

2043-05-03 • Anticipated expiration

Info: Patent citations (4), Legal events, Similar documents, Priority and Related Applications

External links: Espacenet, Global Dossier, Discuss

Step 4

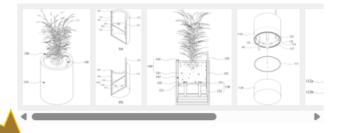
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Images (6)



assifications

■ A01G27/005 Reservoirs connected to flower-pots through conduits

Landscapes

KR102653506B1

South Korea

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Other languages: Korean

Inventor: 김준일

Worldwide applications

2023 · KR

Application KR1020230057654A

events ⑦

2023-05-03 • Application filed by 김준

2023-05-03 • Priority to

KR1020230057654A

2024-03-29 · Application granted

2024-03-29 • Publication of KR102653506B1

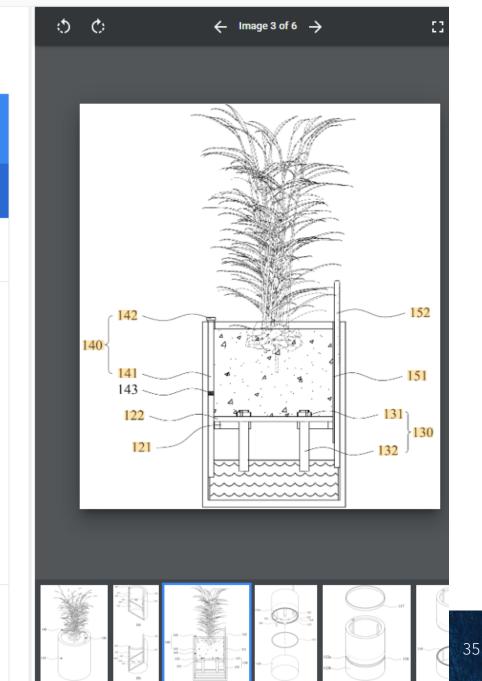
 Active Status

2043-05-03 • Anticipated expiration

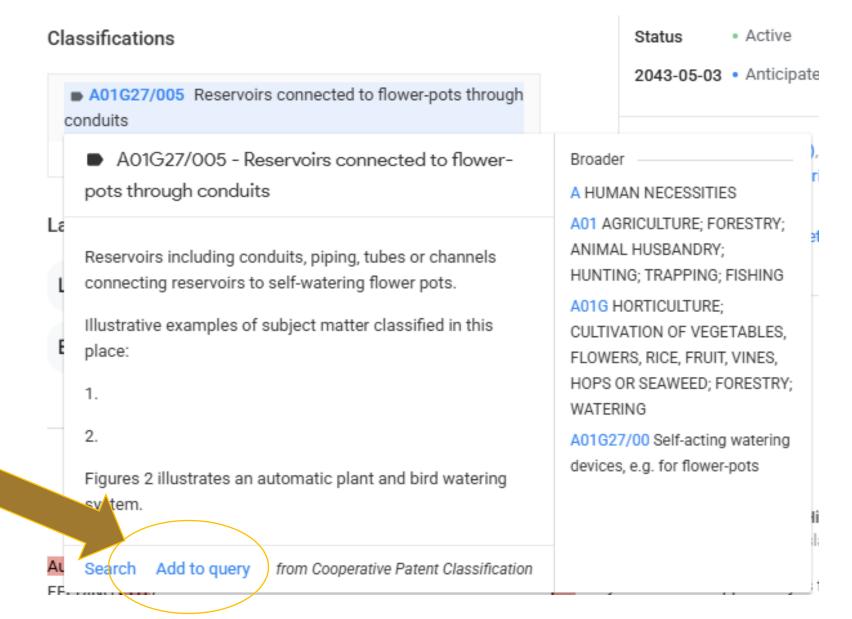
Info: Patent citations (4), Legal events, Similar documents, Priority and Related Applications

External links: Espacenet, Global

Dossier, Discuss



Step 5





("self watering" or "automatic watering" or "automatic irrigation") (planter or pot); (A01G27/005 - Reservoirs connected to flower-pots through conduits)

About 1 results

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Self-irrigation system for multiple potted plants

WO EP US CN JP AU BR CA MX · CN105899069B · 小唐纳德.J.斯图尔特 · 小唐纳德.J.斯图尔特

Priority 2013-11-18 • Filed 2014-10-31 • Granted 2019-09-17 • Published 2019-09-17

Multiple secondary containers, the multiple secondary containers are each located at different elevations and include: Second level shell; Second level on the inside of the second level shell stores basin, and there is the second level storage basin upper part and its center to be located at The ...

About 1 results

Top 1000 results by filing date





Relative count of top 5 values

Assignees

Inventors

CPCs

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("self watering" or "automatic watering" or "automatic irrigation") (planter or pot); (A01G27/005 - Reservoirs connected to flower-pots through conduits)

About 1 results

Download

Sort by · Relevance • Group by · None • Deduplicate by · Family • Results / page · 10 •

Self-irrigation system for multiple potted plants

o EP US CN JP AU BR CA MX・CN105899069B・小唐纳德.J.斯图尔特・小唐纳德.J.斯图尔特

Priority 2013-11-18 • Filed 2014-10-31 • Granted 2019-09-17 • Published 2019-09-17

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About 1 results

Top 1000 results by filing date



Relative count of top 5 values

Assignees CPCs Inventors

IRWIN IP LLP

("self watering" or "automatic watering" or "automatic irrigation") (platering)





1 of 1 < >

Eack to results / ("self watering" or "automatic watering" or "automatic irrigation") (planter or pot); (A01G27/005 - Reservoirs connected to flower-pots through conduits);

Self-irrigation system for multiple potted plants

Abstract translated from Chinese

A multiple plant container self-irrigation system comprising a primary container at a first elevation and a plurality of secondary containers at different elevations in fluid communication via conduits. The primary container comprises: a primary housing surrounding a primary storage pot having an extended upper portion and a tubular lower portion; a primary core; and a primary planting pot. Each of the plurality of secondary containers comprises: a secondary housing surrounding a secondary storage pot having an extended upper portion and a tubular lower portion; a secondary core; and a secondary planting pot. The diameter of the lower portions of the primary and secondary storage pots is greatly reduced compared to the diameter of the upper portions thereof, thereby allowing substantially similar drying times for the plurality of fluidly connected plant containers at different elevations.

Classifications

- A01G27/04 Self-acting watering devices, e.g. for flower-pots using wicks or the like
- A01G27/001 Self-acting watering devices, e.g. for flower-pots with intermittent watering means
- A01G27/06 Self-acting watering devices, e.g. for flower-pots using wicks or the like having a water reservoir, the main part thereof being located wholly around or directly beside the growth substrate
- A01G27/005 Reservoirs connected to flower-pots through conduits

Hide more classifications

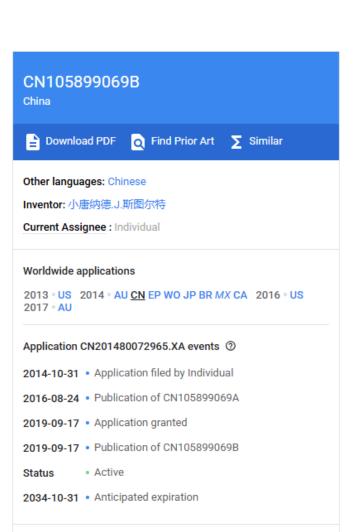
Landscapes











Info: Patent citations (41), Cited by (13), Legal events, Similar

documents, Priority and Related Applications

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("self watering" or "automatic watering" or "automatic irrigation") and (planter or pot)

("self watering" or "automatic watering" or "automatic irrigation") (planter or pot);

About 21 results

Sort by · Relevance · Group by · None · Deduplicate by · Family · Results / page · 10 ·

Self-irrigation system for multiple potted plants

WO EP US CN JP AU BR CA MX・CN105899069B・小唐纳德.J.斯图尔特・小唐纳德.J.斯图尔特

Priority 2013-11-18 • Filed 2014-10-31 • Granted 2019-09-17 • Published 2019-09-17

Multiple secondary containers, the multiple secondary containers are each located at different elevations and include: Second level shell; Second level on the inside of the second level shell stores basin, and there is the second level storage basin upper part and its center to be located at The ...

A **self watering** flowerpot



KR • KR102377902B1 • 김흥기 • 김흥기

Priority 2019-01-10 • Filed 2019-01-10 • Granted 2022-03-24 • Published 2022-03-24

a partition plate 2 provided in a horizontal direction in the middle of the inner side of the flowerpot 1; a planting part (3) formed on the inner upper part of the pot (1) by the partition plate (2) to put soil and plants or plants; a water storage unit (4) formed on the lower inner side of the ...

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US • US5351437A • Fred W. Lishman • Lishman Fred W



Priority 1992-05-12 • Filed 1992-05-12 • Granted 1994-10-04 • Published 1994-10-04

15. The moisture sensitive irrigation system according to claim 14, wherein said means for irrigating comprises a manual shut-off valve mounted in said water tower and coupled between said valve and said supply of water, and flexible tubing coupling said manual shut-off valve to said valve, and ...

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• RU224226U1 • Александр Владиславович Казанцев • Александр Владиславович Казанцев

Filed 2023-07-20 • Granted 2024-03-19 • Published 2024-03-19

A pot for indoor plants with a water container, consisting of two communicating vessels, which represent a container for the plant and a container for filling water, characterized in that the container for the plant is made smaller in size with the possibility of coaxial placement in the water ...

Automatic water-feeding pot



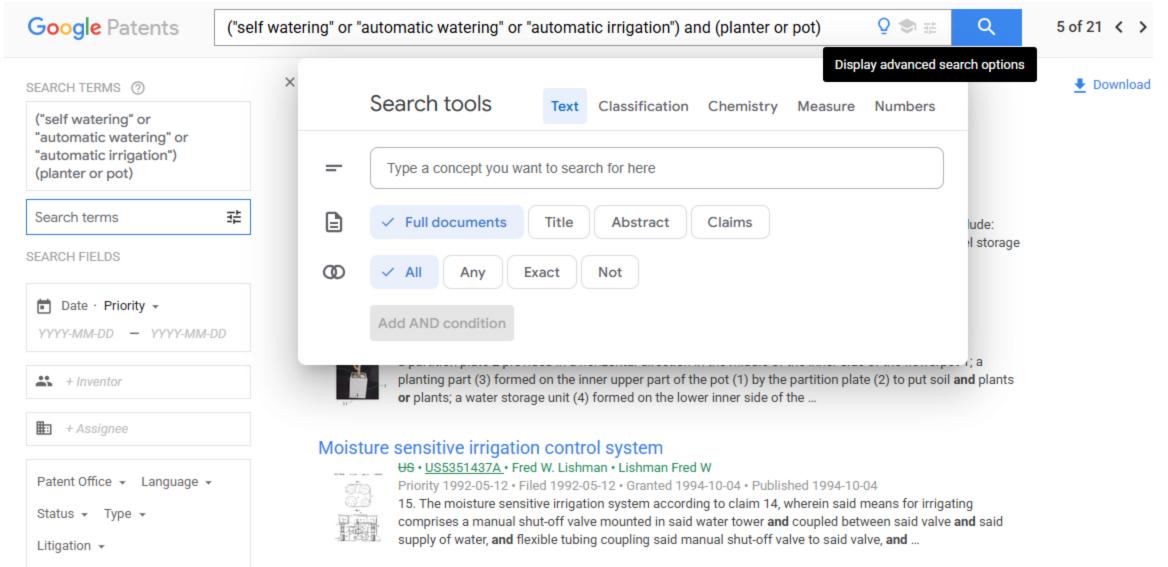
KR · KR102653506B1 · 김준일 · 김준일

Priority 2023-05-03 • Filed 2023-05-03 • Granted 2024-03-29 • Published 2024-03-29

An automatic irrigation flowerpot comprises: a flowerpot main body which accommodates water in a lower main body and provides the water to culture soil; a support part which is composed of a support end and a support plate; a water supply part which is composed of a core material and a stopper; a ...

Side-by-side

Step 9



Dot for indoor plants with water contains



07

Questions?

IIP Resources

IIP Resources

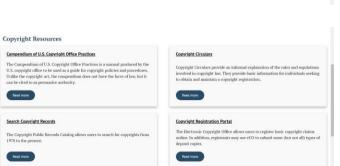
We have a myriad of presentations and resources for patents, copyrights, trademarks, and trade secrets and associated statutes, federal practices and procedures, jury instructions, etc.

Check out:

https://irwinip.com/resources/

- Trade Secrets Map
- Local Rules Map
- Presentations







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