

Thank You for Not Publishing

Lidiya Mishchenko

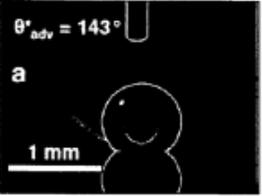
AALS 2021 Panel: New Voices in IP

January 6, 2021

Patent Theory: The Disclosure

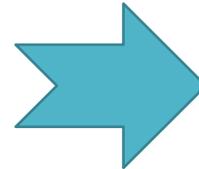
Specification/Written Description

[0004] Surfaces having a nanotexture can exhibit extreme wetting properties. A nanotexture refers to surface features, such as ridges, valleys, or pores, having nanometer (i.e., typically less than 1 micrometer) dimensions. In some cases, the features can have an average or rms dimension on the nanometer scale, even though some individual features may exceed 1 micrometer in size. The nanotexture can be a 3D network of interconnected pores. Depending on the structure and chemical composition of a surface, the surface can be hydrophilic, hydrophobic, or at the extremes, superhydrophilic or superhydrophobic.



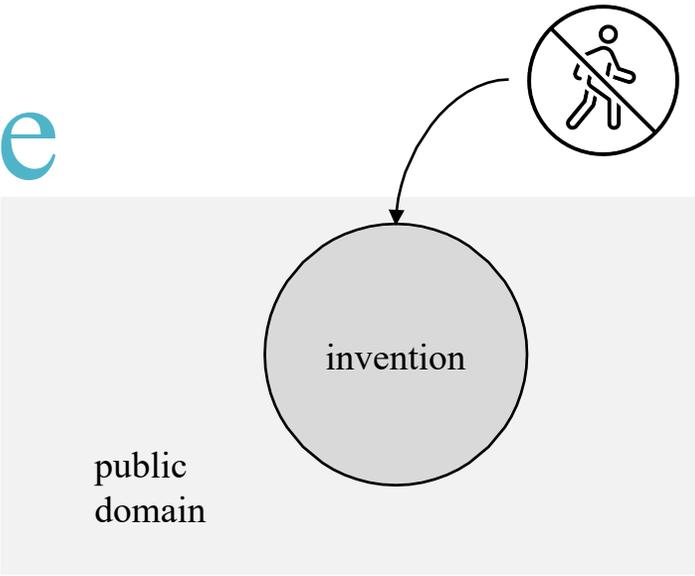
$\theta_{adv} = 143^\circ$
a
1 mm

Invention Disclosure



Claims

1. An article comprising a super-oleophobic surface.
2. The article of claim 1, wherein the superoleophobic surface includes nanoparticles.



Define Temporary Monopoly (“Notice”):

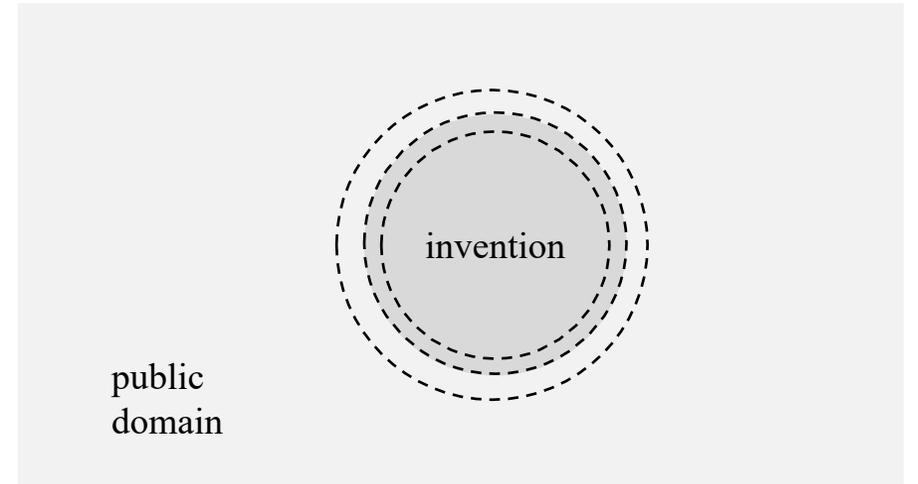
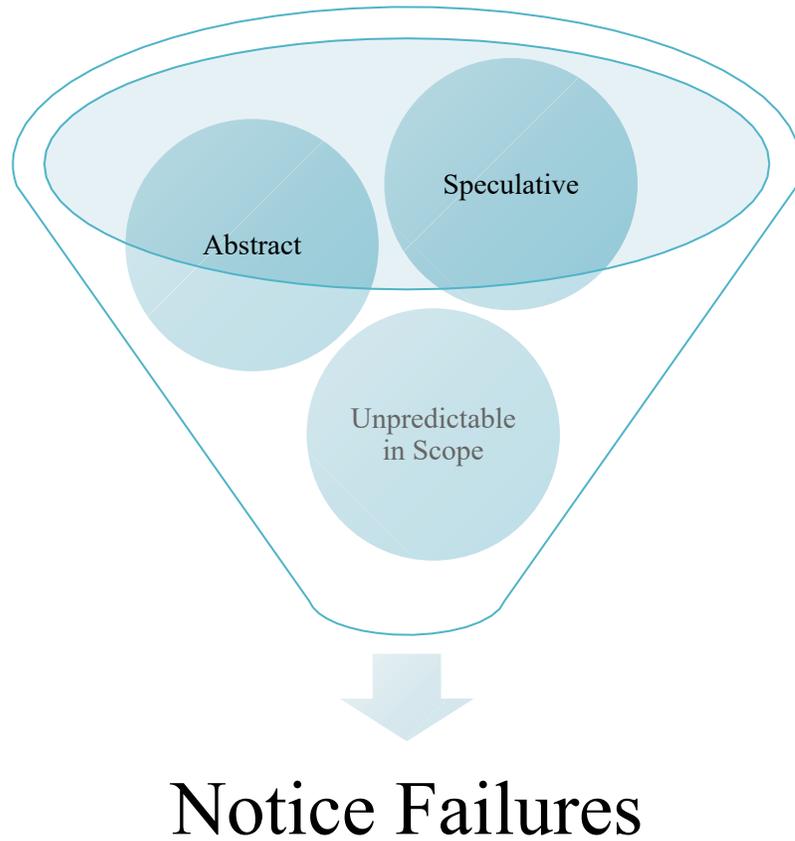
- For inventor to: recoup expenses or invest in commercialization (e.g., license, exclusively produce)
- For rest of the world to: avoid duplication, build on work



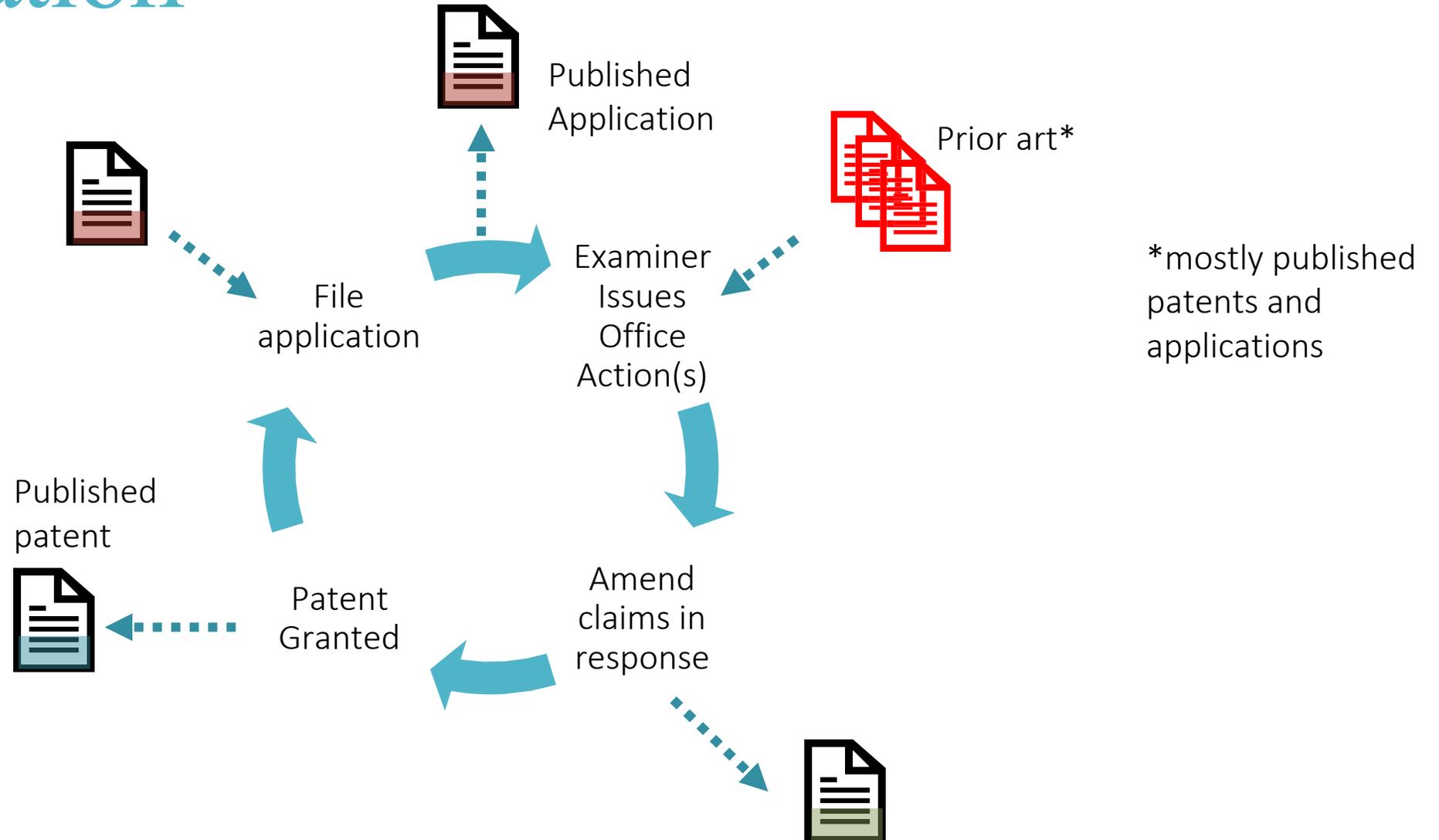
Encourage innovation



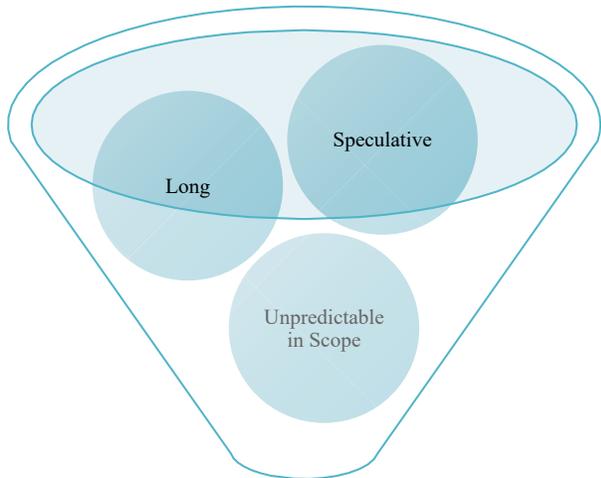
Patent Reality: The Disclosure



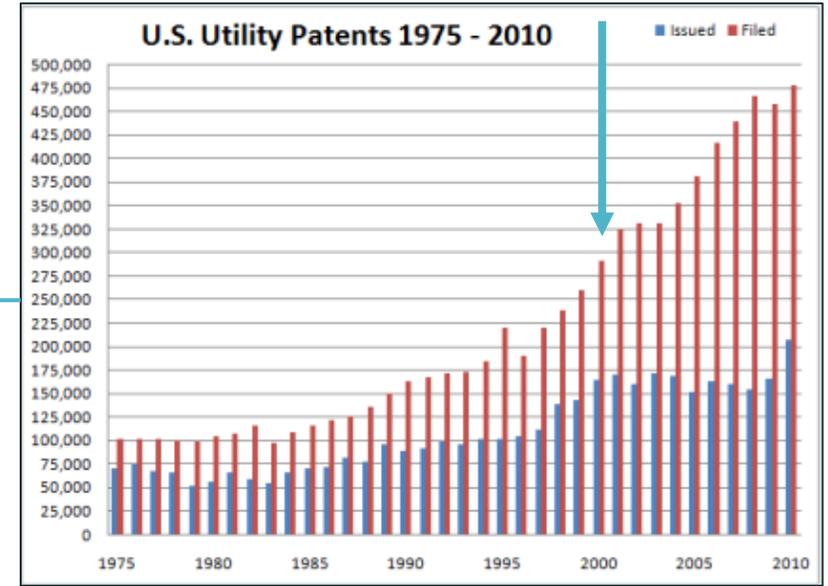
Examination



Patent Reality: The Disclosure

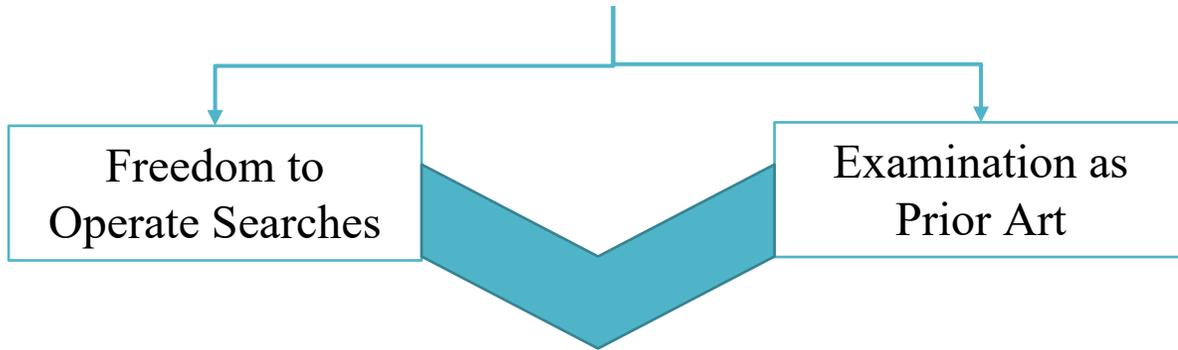


Applications filed & published in ever-increasing numbers

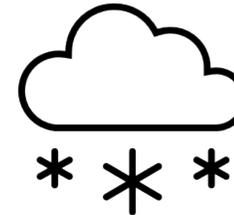
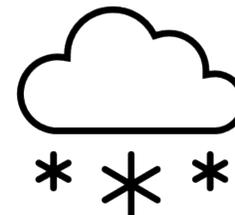


Source: IP Watchdog

Notice Failures



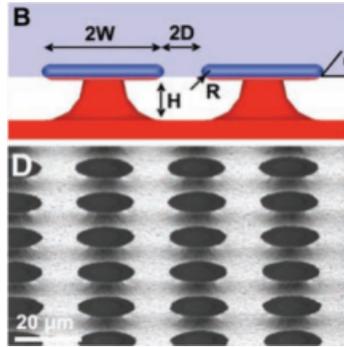
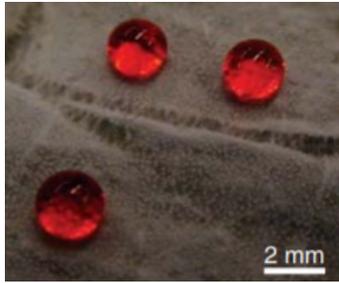
Chilling effect on innovation



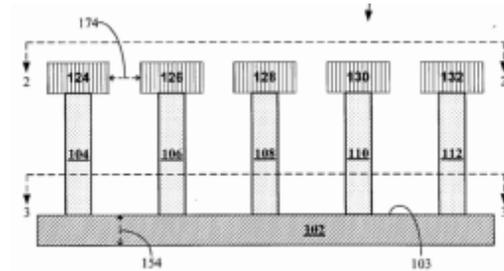
Example

Originally filed claim: (US 12/599,465)

1. An article comprising a Super-oleophobic Surface.



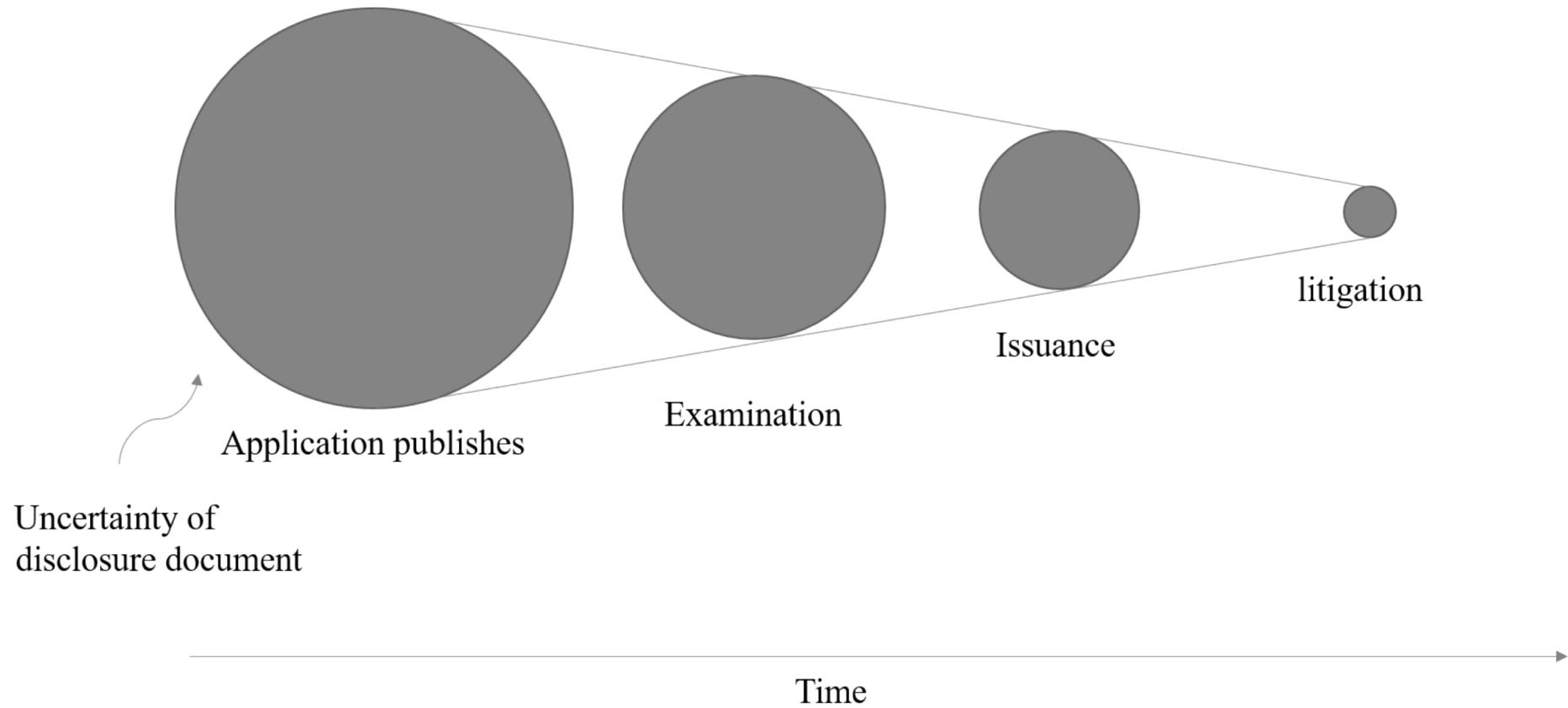
Examiner rejection based on US20070224391A1 (prior art)



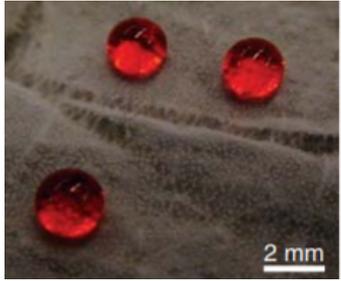
Granted claim: (US10202711)

1. An article comprising a super-oleophobic surface, wherein the super-oleophobic surface includes **nanoparticles** on a surface including a plurality of **structures**, wherein the plurality of structures include **flat caps**, each of the plurality of structures including a width, a height, a protruding portion configured to protrude toward a liquid having a liquid-vapor interface between two adjacent structures and a re-entrant portion opposite the protruding portion, and a curved portion connecting the protruding portion and the re-entrant portion having a radius of curvature greater than zero, wherein the **nanoparticles are fluorinated polyhedral oligomeric silsesquioxanes.**

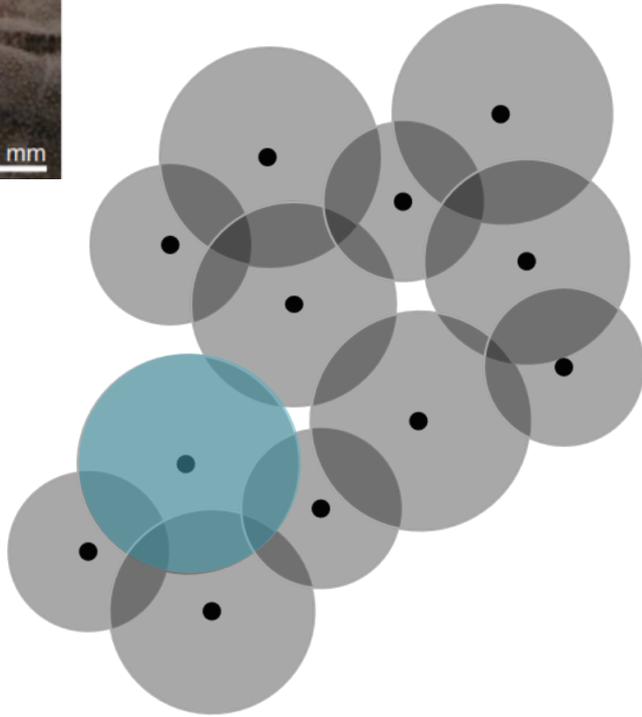
Patent Document: Notice Uncertainty Over Time



Freedom to Operate Searching

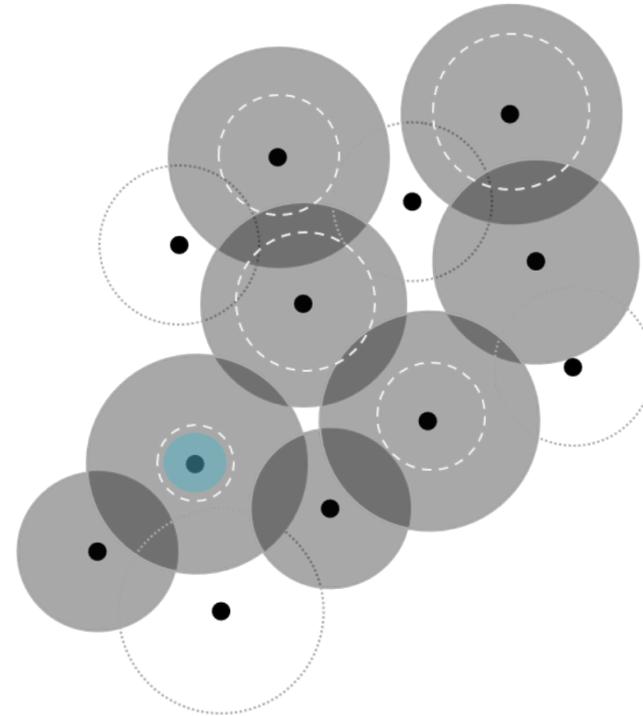


Search Results



Application

Reality



Issued claim

The Balance

- Publishing Unexamined Applications:
 - Recognize that we have made a tradeoff between timeliness and quality of notice
- Change when or how we publish patent applications

