



# Utility Patents: Utility (Usefulness)

Industry & Invention  
Patent

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## Five requirements for a valid patent:

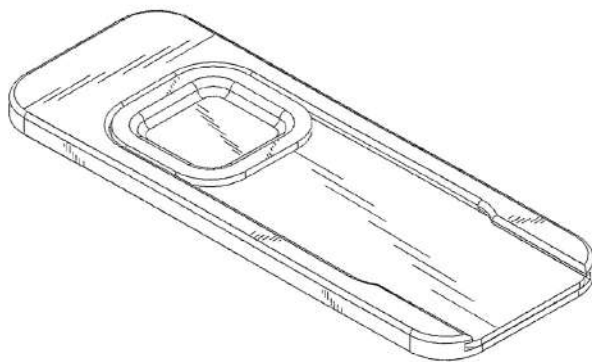
- Patentable subject matter
- Novelty
- Nonobviousness
- Utility
- Disclosure

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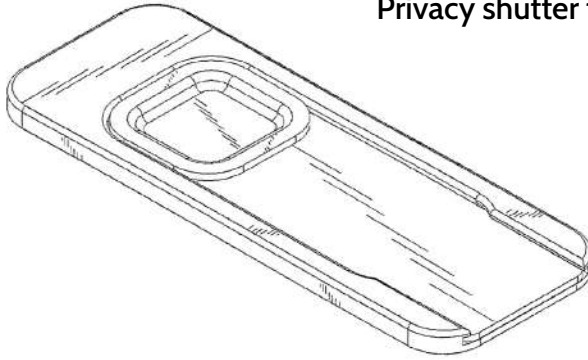
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➔ **Utility**

- Disclosure

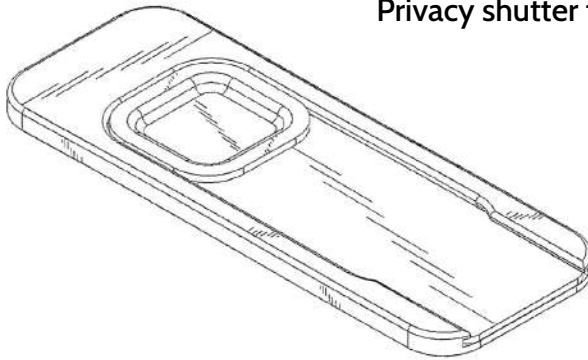


Privacy shutter for laptop camera



There have been other laptop-camera privacy shutters before, which all function the same way. But this is the first to have this particular shape with rounded corners, beveling, and so forth. The applicant states this makes it more aesthetically appealing, and thus more useful and valuable for consumers.

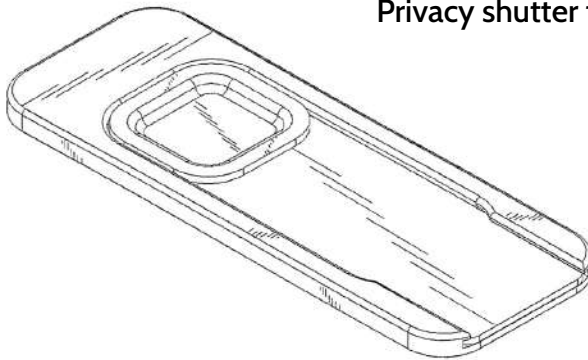
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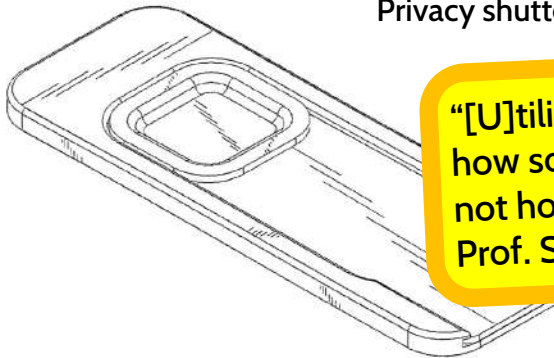


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No → for lack of utility. The invention is novel—since it's not in the prior art. But it lacks utility, because what's new is not functional. Alleged aesthetic usefulness doesn't count.

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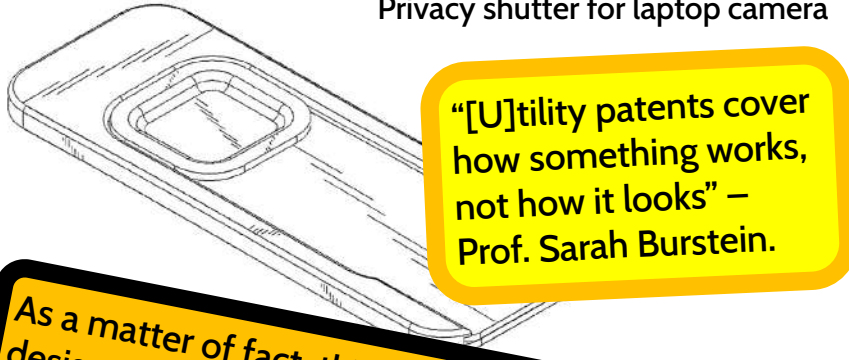
“[U]tility patents cover how something works, not how it looks” – Prof. Sarah Burstein.

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“[U]tility patents cover how something works, not how it looks” – Prof. Sarah Burstein.

As a matter of fact, this illustration comes from design patent U.S. D873,833.

The prior art letters before, which all refer to this particular shape with rounded corners. The applicant states this makes it more aesthetically pleasing and thus more useful and valuable for consumers.

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## Kinds of Utility

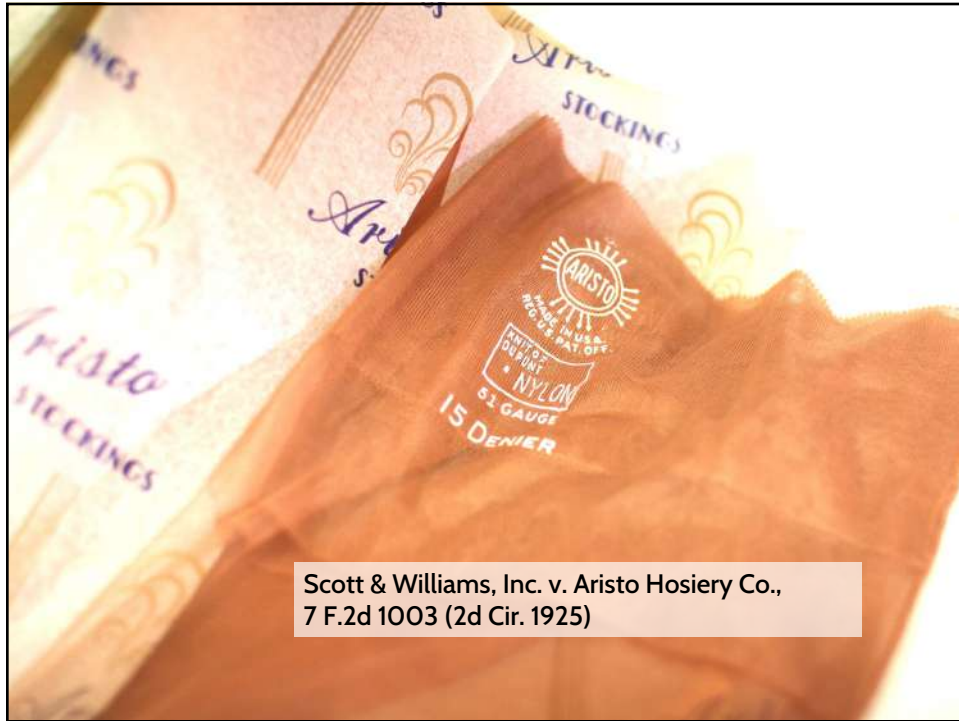
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- Operability (general utility)
- Specific Utility (practical utility)
- Substantial Utility (practical utility)

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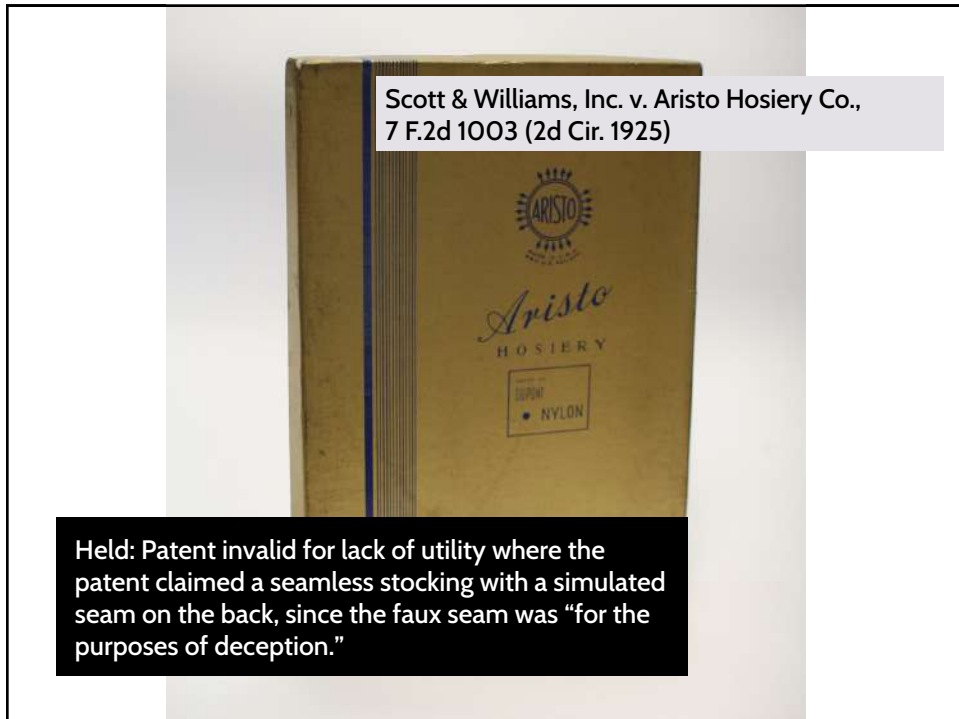
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## Moral utility

- The invention must “not be frivolous or injurious to the well-being, good policy, or sound morals of society.”
- Many argue this doctrine is dead.
- If an invention can be put to at least one lawful use, it will be considered “useful” in this sense.



Scott & Williams, Inc. v. Aristo Hosiery Co.,  
7 F.2d 1003 (2d Cir. 1925)



Scott & Williams, Inc. v. Aristo Hosiery Co.,  
7 F.2d 1003 (2d Cir. 1925)

Held: Patent invalid for lack of utility where the patent claimed a seamless stocking with a simulated seam on the back, since the faux seam was “for the purposes of deception.”

Juicy Whip, Inc. v. Orange Bang, Inc.,  
185 F.3d 1364 (Fed. Cir. 1999)



Held: Patent for drink dispenser that appeared to circulate beverage, where liquid was actually an undrinkable display fluid, met the threshold requirement of utility.



### Juicy Whip v. Orange Bang (Fed. Cir. 1999)

“[Y]ears ago courts invalidated patents on gambling devices on the ground that they were immoral ..., but that is no longer the law ... Congress never intended that the patent laws should displace the police powers of the States, meaning by that term those powers by which the health, good order, peace and general welfare of the community are promoted ... we find no basis in section 101 to hold that inventions can be ruled unpatentable for lack of utility simply because they have the capacity to fool some members of the public.”



## MPEP on Moral Utility

A rejection under 35 U.S.C. 101 for lack of utility should not be based on grounds that the invention is frivolous, fraudulent or against public policy. See *Juicy Whip Inc. v. Orange Bang Inc.* (Fed. Cir. 1999).

## Kinds of Utility

- Moral utility (policy/legality)
- [Operability \(general utility\)](#)
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## Operability (a/k/a general utility, a/k/a “credible operability”)

- An invention that is “inoperative” (i.e., it does not operate to produce the results claimed by the patent applicant) is not a “useful” invention in the meaning of the patent law.
- “An inoperative invention, of course, does not satisfy the requirement of 35 U.S.C. 101 that an invention be useful.” – *In re Harwood*, 390 F.2d 985, 989 (CCPA 1968)

## Operability

- Rejections on the basis of inoperability are rare. The threshold is low.
- “To violate § 101 the claimed device must be totally incapable of achieving a useful result.” – *Brooktree Corp. v. Advanced Micro Devices, Inc.*, 977 F.2d 1555, 1571 (Fed. Cir. 1992)

## Operability

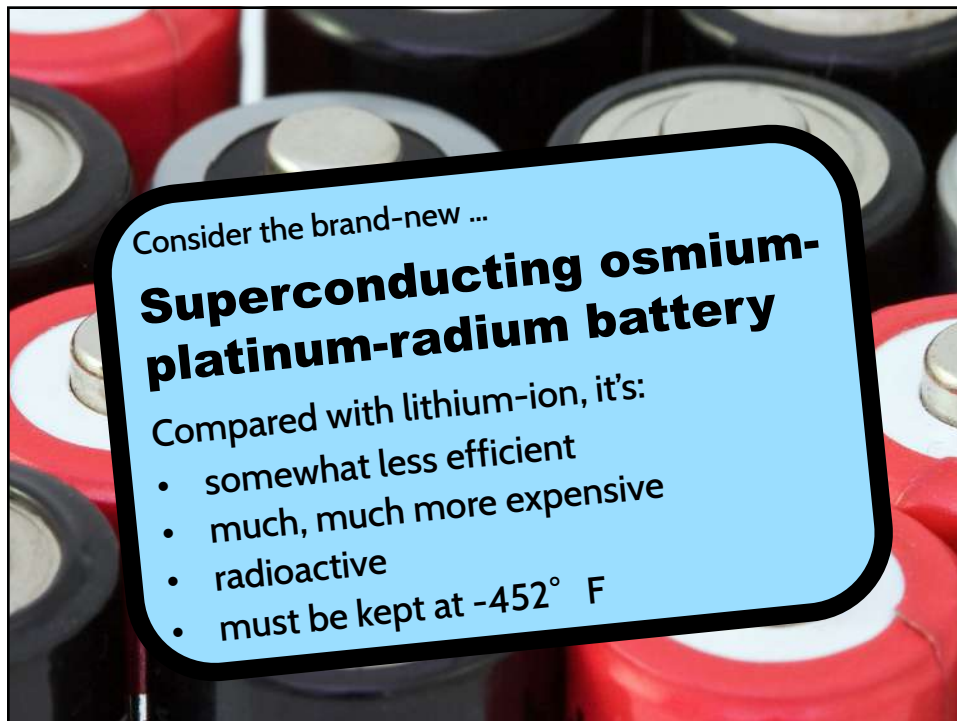
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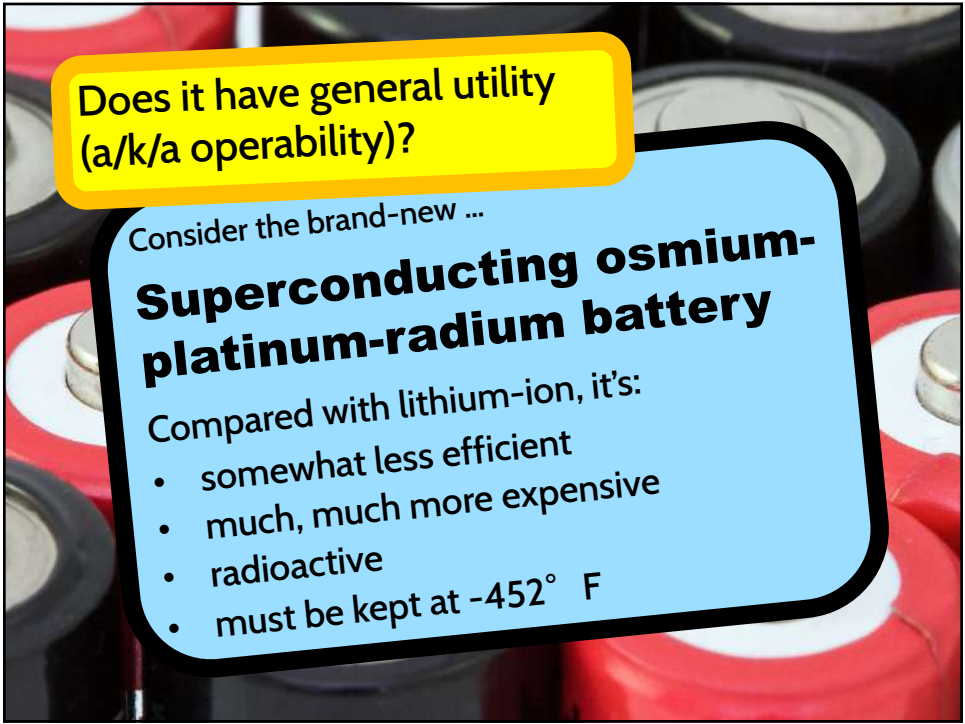
## Operability

“A small degree of utility is sufficient ... An invention does not lack utility merely because the particular embodiment disclosed in the patent lacks perfection or performs crudely ... A commercially successful product is not required ... Nor is it essential that the invention accomplish all its intended functions ... [P]artial success [is] sufficient to demonstrate patentable utility ...” – E.I. du Pont De Nemours and Co. v. Berkley and Co., 620 F.2d 1247, 1260 n.17, (8th Cir. 1980).

## Operability

“A small degree of utility is sufficient ... An invention does not lack utility merely because the particular embodiment disclosed in the patent lacks perfection or performs crudely ... A commercially successful product is not required ... Nor is it essential that the invention accomplish all its intended functions ... [P]artial success [is] sufficient to demonstrate patentable utility ...” – E.I. du Pont De Nemours and Co. v. Berkley and Co., 620 F.2d 1247, 1260 n.17, (8th Cir. 1980).





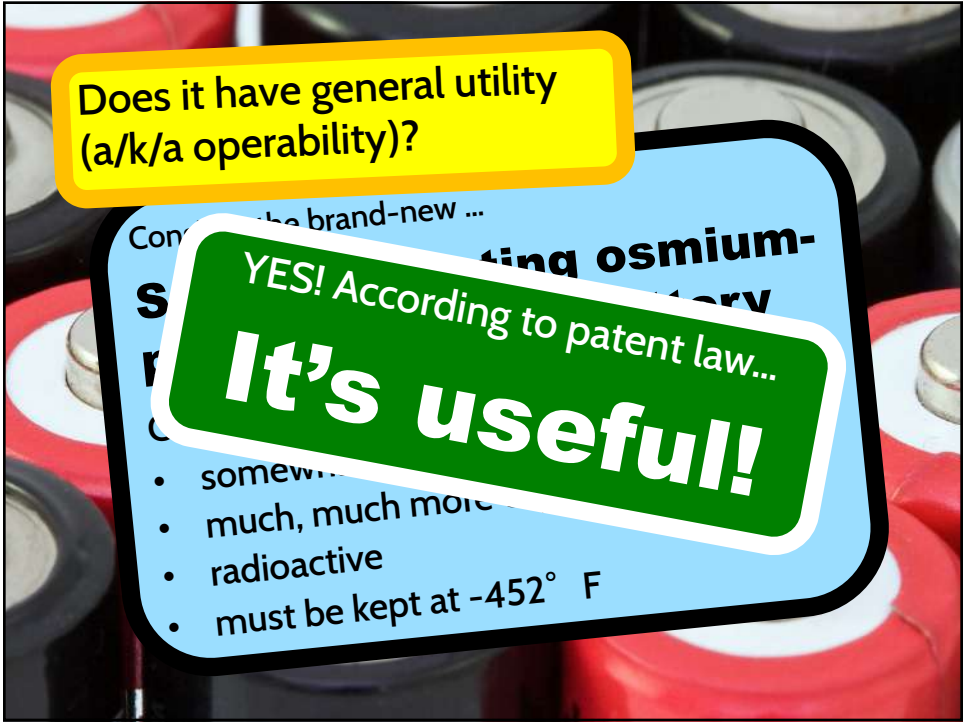
Does it have general utility (a/k/a operability)?

Consider the brand-new ...

### Superconducting osmium-platinum-radium battery

Compared with lithium-ion, it's:

- somewhat less efficient
- much, much more expensive
- radioactive
- must be kept at  $-452^{\circ}$  F



Does it have general utility (a/k/a operability)?

Consider the brand-new ...

### Superconducting osmium-platinum-radium battery

YES! According to patent law...

**It's useful!**

- somewhat less efficient
- much, much more expensive
- radioactive
- must be kept at  $-452^{\circ}$  F

## Kinds of Utility

- Moral utility (policy/legality)
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## Specific Utility (a/k/a practical utility)

It is not enough for the applicant to declare usefulness generally. There must be a specific thing the invention does that is useful – i.e., a showing of specific utility.

Specific utility is rarely an issue with most inventions. However, specific utility is key hurdle to patentability in:

- chemistry
- biotechnology

## Specific Utility

A “specific utility” is specific to the subject matter claimed and can “provide a well-defined and particular benefit to the public.” In re Fisher, 421 F.3d 1365, 1371, (Fed. Cir. 2005).

This contrasts with a general utility (operability) that would be applicable to the broad class of the invention.

## Specific Utility

Examples of **insufficient** statements of specific utility:

- A newly synthesized compound that can be used as a paperweight.
- A newly synthesized compound that may be useful in treating unspecified disorders.
- A newly synthesized compound that has “useful biological” properties.
- A polynucleotide whose use is disclosed simply as a “gene probe” or “chromosome marker,” without disclosure of a specific DNA target.

## Specific Utility

Examples from diagnostics:

Ex. 1: Applicant makes a general statement of diagnostic utility, such as diagnosing an unspecified disease.

→ **Insufficient.**

Ex. 2: Applicant discloses a specific biological activity and reasonably correlates that activity to a disease condition.

→ **Sufficient to identify a specific utility.**

## Kinds of Utility

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## Substantial Utility

(can be thought of as a subset of specific or practical utility)

There must be a current, real-world benefit to the invention.

As with specific utility, this is a key hurdle for

- chemistry
- biotechnology

## Specific Utility in the Therapeutic or Pharmacological Context

Nelson v. Bowler, 626 F.2d 853 (CCPA 1980):

“Knowledge of the pharmacological activity of any compound is obviously beneficial to the public. It is inherently faster and easier to combat illnesses and alleviate symptoms when the medical profession is armed with an arsenal of chemicals having known pharmacological activities. Since it is crucial to provide researchers with an incentive to disclose pharmacological activities in as many compounds as possible, we conclude that adequate proof of any such activity constitutes a showing of practical utility.”

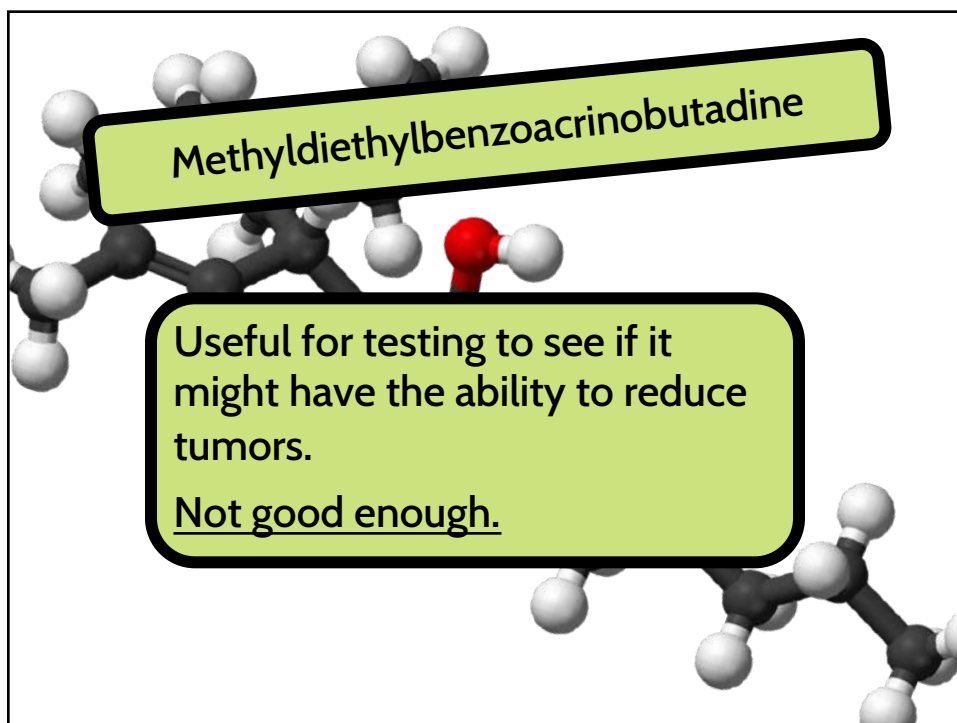
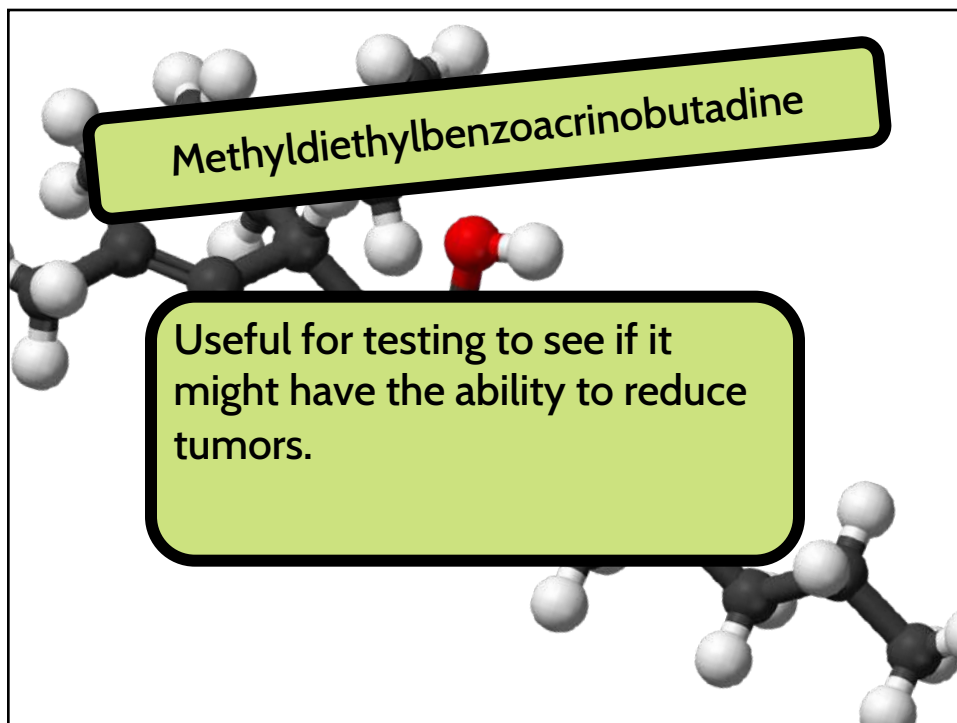
## Specific Utility in the Context of Research Tools

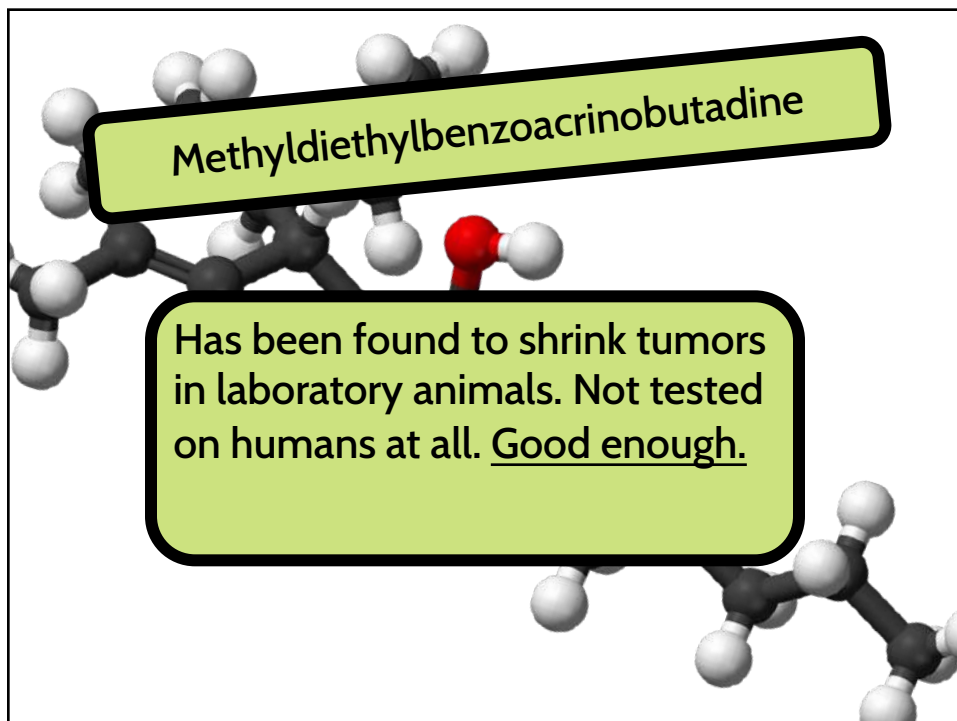
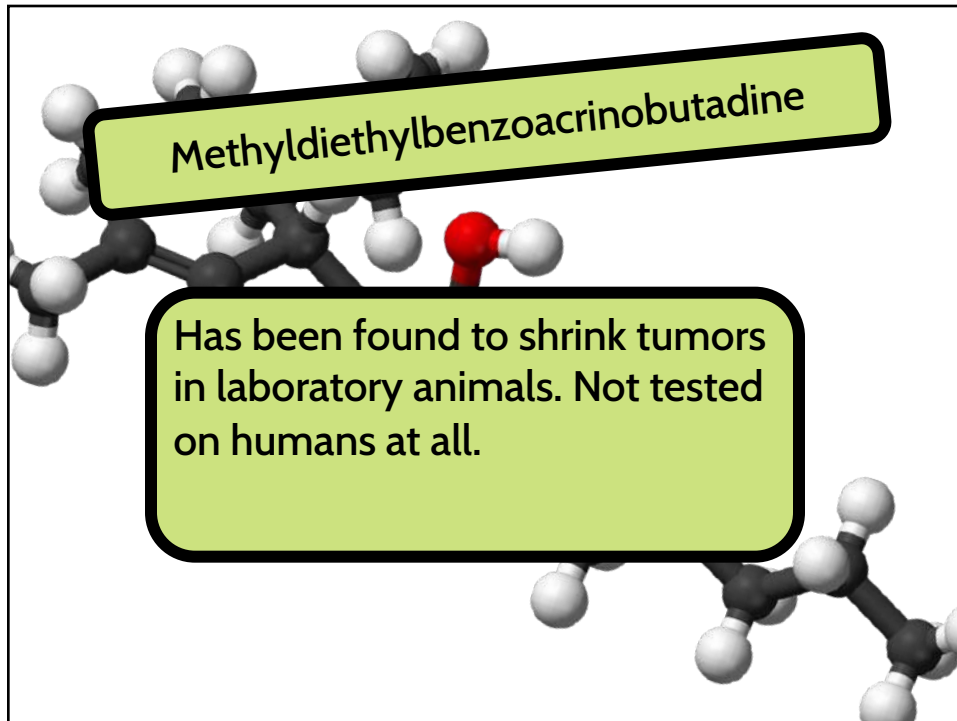
A research tool, such as a gas chromatograph, is useful and meets the utility requirement.

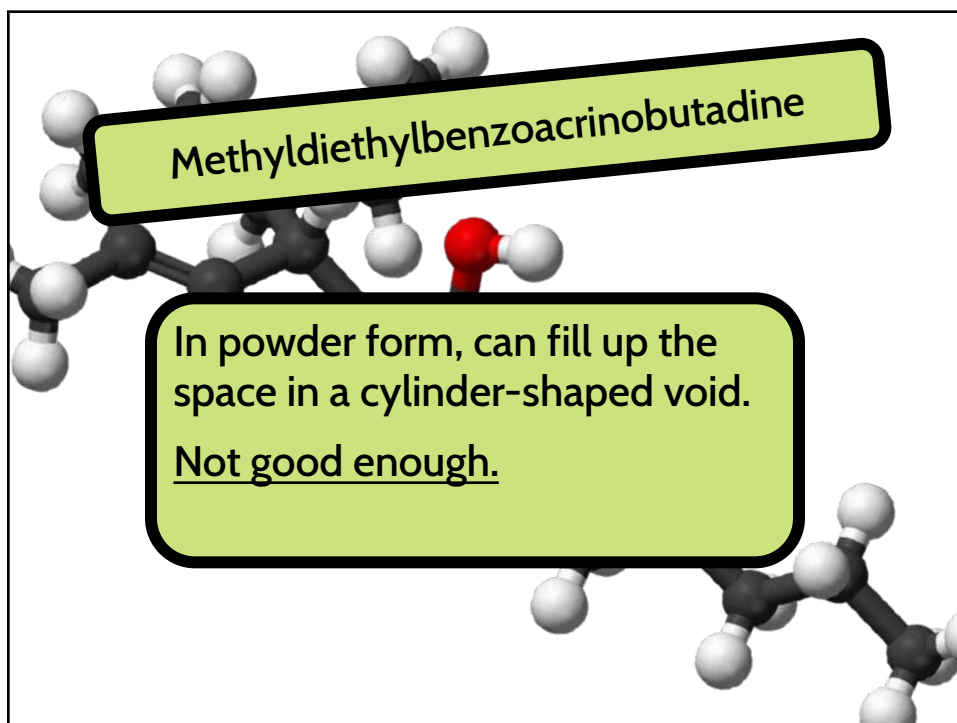
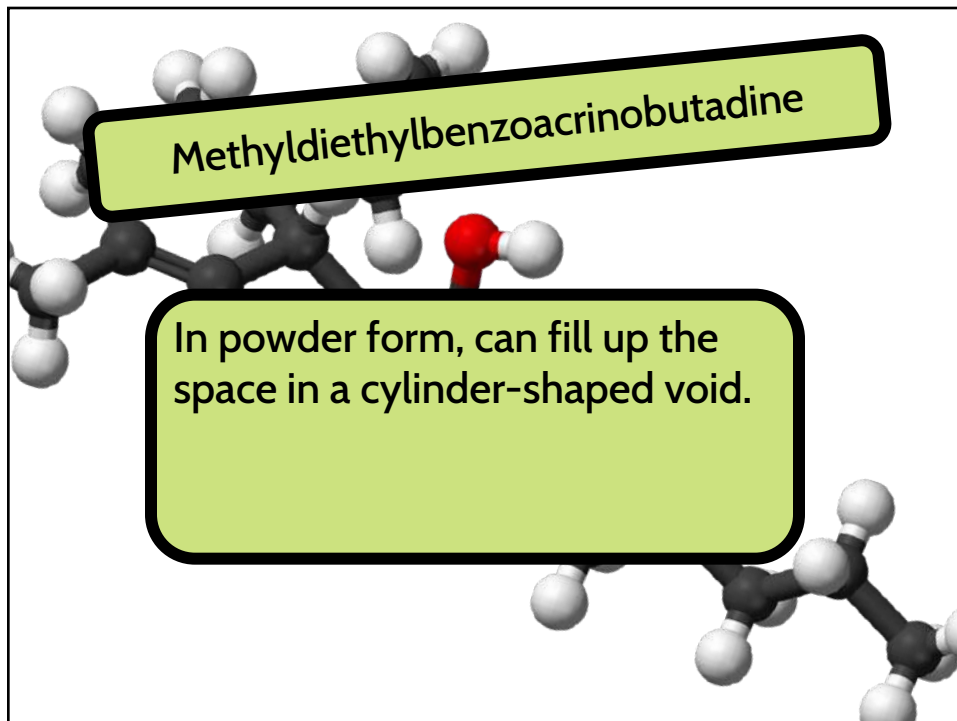
But where the invention's use in research is *to research the invention itself*, then the utility requirement is not met.



Hypotheticals ...









Methyldiethylbenzoacrinobutadine

Has been shown to be pharmacologically active in laboratory studies, and is useful for further research in determining whether it might be a useful chemotherapy agent.



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Good enough.

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