



Industry & Invention
Patent

Utility Patents Nonobviousness

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Nonobviousness

Nonobviousness how-to

SCOTUS in *Graham v. John Deere* says:

- Determine the scope and content of the prior art
- Note the differences between the prior art and the claimed invention
- Determine the level of ordinary skill in the art
- Consider secondary factors as well (the “Graham factors”)

Graham factors

- Commercial success
- Long-felt but unsolved need
- Failure of others
- Copying of inventor
- Unexpected results
- Skepticism of experts
- Acquiescence
- Adoption by industry

“[W]hen a patent ‘simply arranges old elements with each performing the same function it had been known to perform’ and yields no more than one would expect from such an arrangement, the combination is obvious.”

KSR v. Teleflex (U.S. 2007) (quoting Sakraida v. Ag Pro (U.S. 1976))

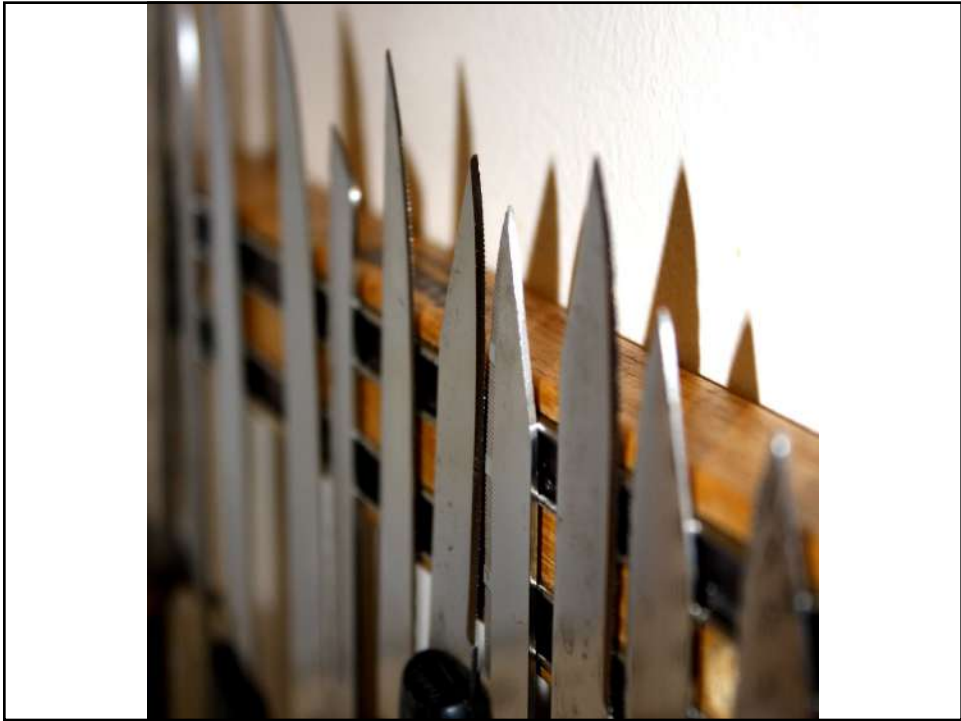
“[A] court must ask whether the improvement is more than the predictable use of prior art elements according to their established functions.”

KSR v. Teleflex (U.S. 2007)

“Often, it will be necessary for a court to look to interrelated teachings of multiple [prior art references]; the effects of demands ... in the marketplace; and the background knowledge possessed by a [PHOSITA], all in order to determine whether there was an apparent reason to combine. ... [T]he analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a [PHOSITA] would employ.”

KSR v. Teleflex (U.S. 2007)

Hypotheticals ...





Nonobviousness

Hypothetical:

Applicant claims a cell phone having graphics on the back cover of vibrant day-glow yellow stripes overlaid by chartreuse polka dots. This is novel – there is no prior art reference that discloses this. The applicant created this phone design in response to a trend in furniture, clothing, and personal accessories where yellow stripes are overlaid by chartreuse polka dots.

Is this nonobvious?

Hypothetical:

Applicant claims a cell phone having graphics on the back cover of vibrant day-glow yellow stripes overlaid by chartreuse polka dots. This is novel – there is no prior art reference that discloses this.

The applicant created this phone design in response to a trend in furniture, clothing, and personal accessories where yellow stripes are overlaid by chartreuse polka dots.

Is this nonobvious?

→ No. This will be obvious under KSR.

Hypothetical:

Applicant claims a bird feeder having graphics on all opaque surfaces of vibrant day-glow yellow stripes overlaid by chartreuse polka dots. This is novel – there is no prior art reference that discloses this. The applicant created this bird feeder design in response to a trend in furniture, clothing, and personal accessories where yellow stripes are overlaid by chartreuse polka dots. But serendipitously, the applicant found that this design causes squirrels to avoid the bird feeder. In the past, squirrels taking food from bird feeders has been a well-known problem among persons making and using bird feeders.

Is this nonobvious?

Hypothetical:

Applicant claims a bird feeder having graphics on all opaque surfaces of vibrant day-glow yellow stripes overlaid by chartreuse polka dots. This is novel – there is no prior art reference that discloses this. The applicant created this bird feeder design in response to a trend in furniture, clothing, and personal accessories where yellow stripes are overlaid by chartreuse polka dots. But serendipitously, the applicant found that this design causes squirrels to avoid the bird feeder. In the past, squirrels taking food from bird feeders has been a well-known problem among persons making and using bird feeders.

Is this nonobvious?

→ **Yes. This would seem to be held nonobvious under KSR.**



Apple's "MagSafe" power connection for laptops.

Provide arguments for and against MagSafe being nonobvious.



Apple's "MagSafe" power connector for laptops.

Assume:

- MagSafe was invented in 2005, at a time when laptops were ubiquitous.
- What's claimed is a computer power connector (both sides) that is detachably attachable with reciprocal magnets on connector and receptacle, where the connector can be pulled away non-axially (i.e., from a random angle as opposed to straight out) without damage to any components and without dislocating the laptop.
- To be feasible, the MagSafe needs rare earth magnets that were invented in the 1980s and only became affordable in the 1990s, coming down steadily in price since then and becoming more and more prevalent in a wide range of products.
- In the late 1990s, countertop deep fryers started to be sold in Japan with "break away" magnetically coupled power connectors. These were a response to burn injuries suffered by consumers when tripping the power cord caused the dislocation and overturning of a connected deep fryer.
- MagSafe has been a huge commercial success for Apple, a reason many buyers choose Apple laptops, because many had experience with laptops being pulled off tables when cords were tripped over and/or power connections being damaged from non-axial forces.

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Photo of MagSafe power coupling apparently by Mobius, public domain, via: https://simple.m.wikipedia.org/wiki/File:Apple_magsafe_tight.jpg