

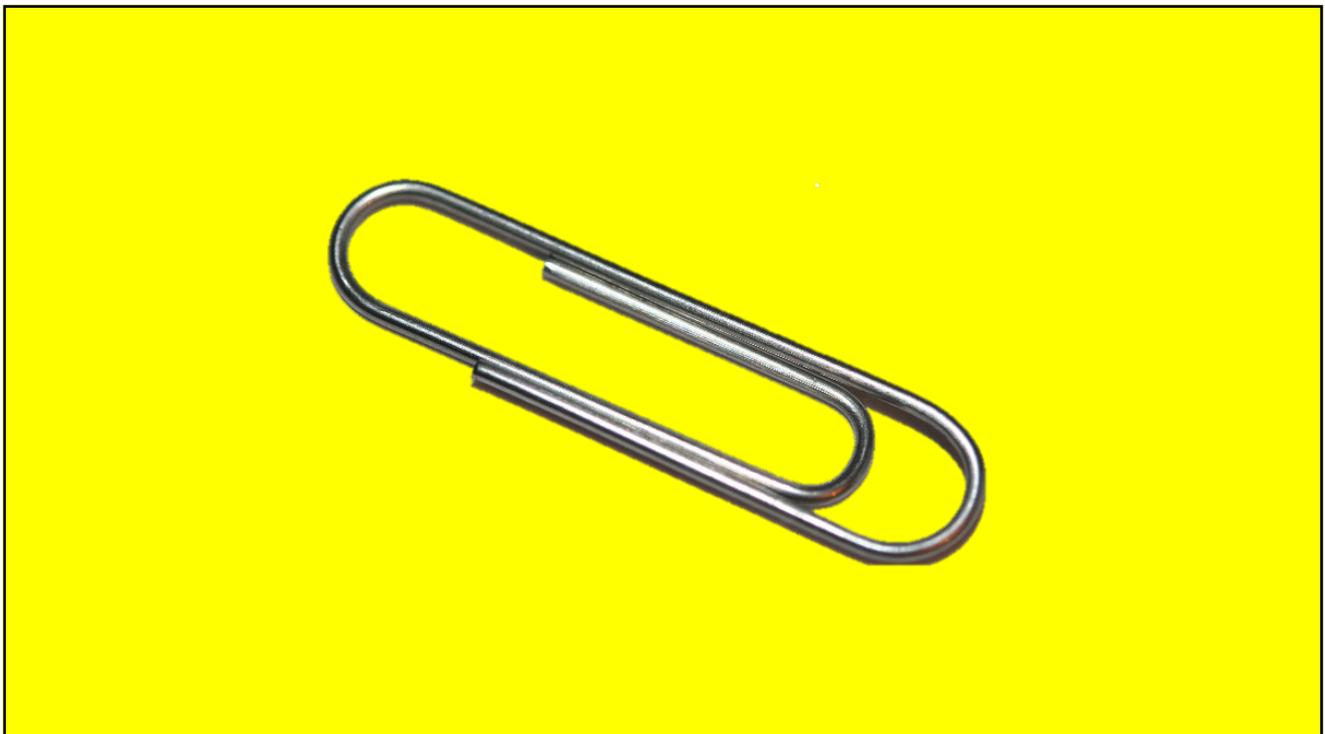
UCL Institute of Brand & Innovation Law
12 February 2020

UCL

What is the function of functionality in trade mark law?

Saeema Ahmed-Kristensen
John P. Professor of Engineering Design
Royal College of Art

57



58

Prof Saeema Ahmed-Kristensen

Cambridge- Technical University of Denmark- Imperial College London- RCA

Head of Design Products

Prof of Engineering Design

s.ahmed-kristensen@rca.ac.uk

Google scholar Saeema ahmed-kristensen

 @SaeemaDesignEng



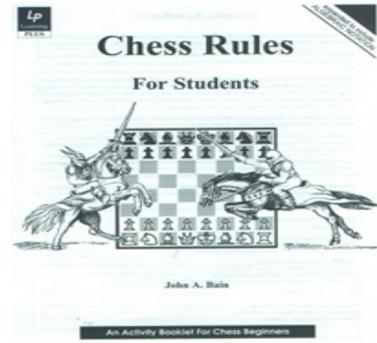
59

Function: technical function- utilitarian
Value: aesthetical function

“the availability or unavailability of alternative designs as evidence of a feature’s functionality.”

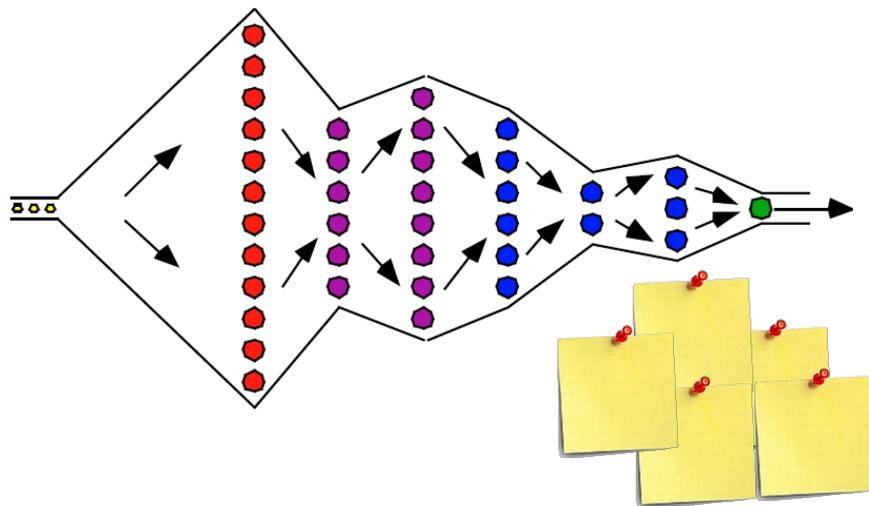
60

Design ill-defined
Initial state - operators – goal state



61

Creativity: divergent and convergent thinking



62

Design

As Ill-defined problem –by definition has design alternatives

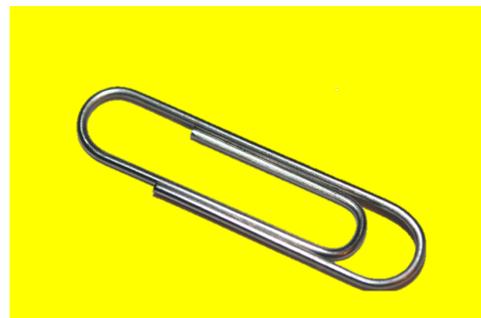
.....the availability or unavailability of alternative designs as evidence of a feature's functionality.

63

Function

- Functions indicate what is required from the solution, i.e. needs to be accomplish
- Usually stated as verb + noun pairs

- fasten paper
- move object
- supply energy



- solution-neutral problem statement

64

1.hem holder
 2.cigar filter unstopper
 3.spray bottle unclogger
 4.eyeglass repair
 5.hair barrette
 6.zipper tab
 7.clean fingernails
 8.Xmas ornament holder
 9.unclog Elmer's glue bottle
 10.calendar holder
 11.belt holder
 12.emergency cotter pin
 13.emergency diaper pin (boy! do I date myself there!)
 14.unclog baby bottle nipples (man! I was sure careful to put all the modifiers in there)
 15.strawberry huller
 16.cherry pit remover
 17.hymn marker (for organists)
 18.a substitute for the thingy that holds
 19.substitute for a twist-tie to close
 20.poke snoozing parishioner
 21.clean the little roller t
 22.a pastor's helper to
 the altar book while c
 23.substitute toothpick
 24.clean the shaft of
 25.toenail cleaner
 26.emergency Tie Tack
 27.inexpensive ear (or b
 28.inexpensive ear (or nose)
 29.when combined with a rubber
 from eighth grade
 30.sparkly and useful alternative to throwing
 31.Lilliputian water diving rod
 32.holding dangles on a pierced ear
 33.cone incense holder/stand
 34.reset a Palm Pilot or Handspring Visor
 35.eject a powered-off LS-120 drive
 36.eject a powered-off Zip drive
 37.eject a powered-off CD-ROM, CD-R, CD-RW, or DVD drive
 38.actor for Microsoft Office "help" system
 39.snow shoes for mice, birds, and other small creatures
 40.booger hunting device
 41.arrange clips to spell "TIP?" and leave in lieu of cash when service stinks in a restaurant
 42.similarly, spell "happy birthday" on a cake for the office workaholic
 43.clip all these suggestions together, wrap, and send as a gift to your cheap, I mean frugal, friends and relations
 44.emergency corkscrew
 45.public hair for Bionic Woman
 46.splint for minor injuries of fingers & toes
 47.makeshift antenna for small electronics
 48.miniature slingshot
 49.miniature catapult
 50.when a fellow smashes his thumb in a range gate, and the blood begins pressuring under the thumbnail, the doctor takes a paper clip, straightens it, heats its tip up good and proper at a bunsen burner, and plunges the thing through the thumbnail to make a hole to relieve the pressure.

51.construction of drinking straw buildings (slide clip in end and link together)
 52.nose weight for paper airplanes
 53.central weight (several together) for a Come-back-can powered by rubber bands
 54.substitute playing pieces for game (bend small part up to grasp)
 55.card holder when strung along string or wire
 56.necklace/bracelet (children love stringing them)
 57.emergency key chain
 58.emergency key to bathroom knobs (the ones that have the hole in the middle to slip a long skinny thing in and pop them open)
 59.quick find tabs for favorite recipes
 60.hold papers together (too obvious?)
 61.book mark
 62.pry bar
 63.lottery ticket scratcher
 64.pipe cleaner
 65-necklace clasp
 66.chain link

Here is the first 100.....

65

Function (technical-)

Segway

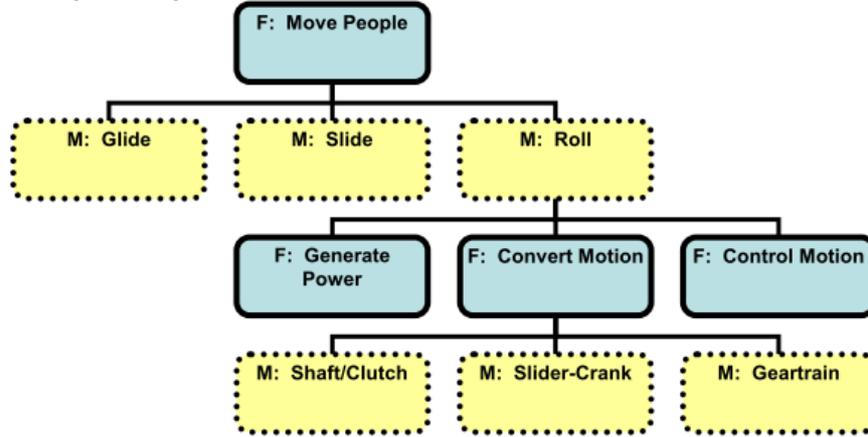
transport people and goods



66

Function: technical more than one way to achieve it

Example: People Mover



<http://www.clemson.edu/ces/cedar/images/c/c0/08-FunctionMeansTree.pdf>

67

Surgical tools over time



68

Reframing problems

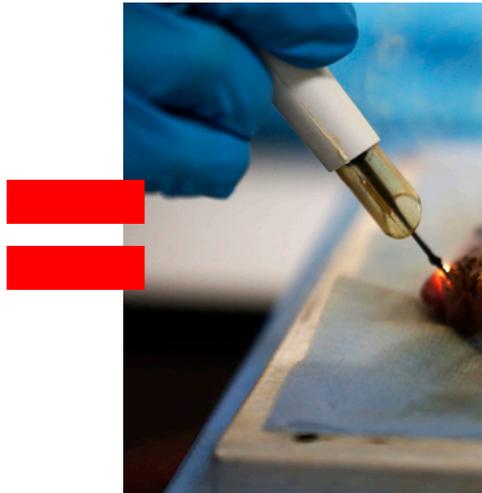
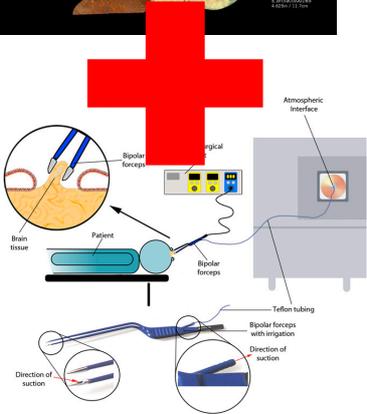
Problem: Where to cut?

Hard to tell where cancer ends and when healthy tissue begins

- **Solution:** Detect cancer during the surgery?



Reframing problem



Citation: J. Balog, et al. Intraoperative Tissue Identification Using Rapid Evaporative Ionization Mass Spectrometry. *Sci. Transl. Med.* 5, 194ra93 (2013).

Value?



My Parker pens, 8 euros each



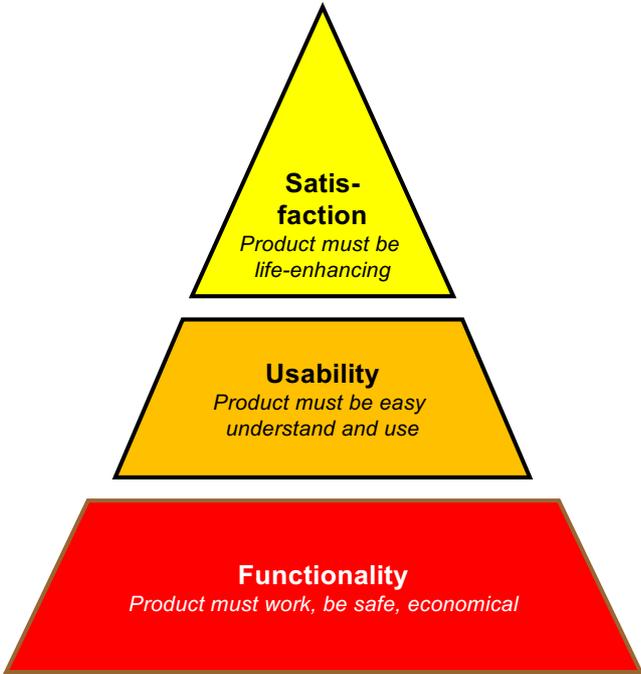
Parker special edition, 3000 euros
Does it write 375 times better?

Product success requires that
Cost < Price < Value

What determines **value**?

-- aesthetics, associations, perceptions

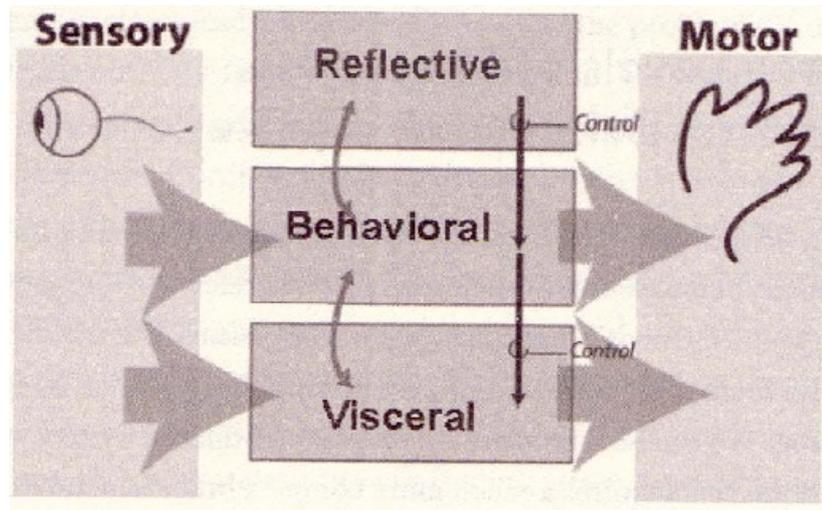
71



Jordan: Heirachy of consumer needs

72

Emotional Responses



Norman, Emotional Design

73

Value..

How can a meaningful distinction be drawn between value resulting from the shape and value resulting from its recognition as an indication of origin (see London taxi case; diverging BoA cases on Eames alu vs. lounge chairs)?

74

Emotional Design

- **Visceral design**
 - first impressions
- **Behavioral design**
 - the total experience of using a product. performance, function, understandability, usability, physical feel
- **Reflection design**
 - self-image, personal satisfaction, memories

75

Reflection design

- “Watches tell more than time” Del Coates,
- **Impossible to design a watch that only tells time.**



Jacob Jensen Clock

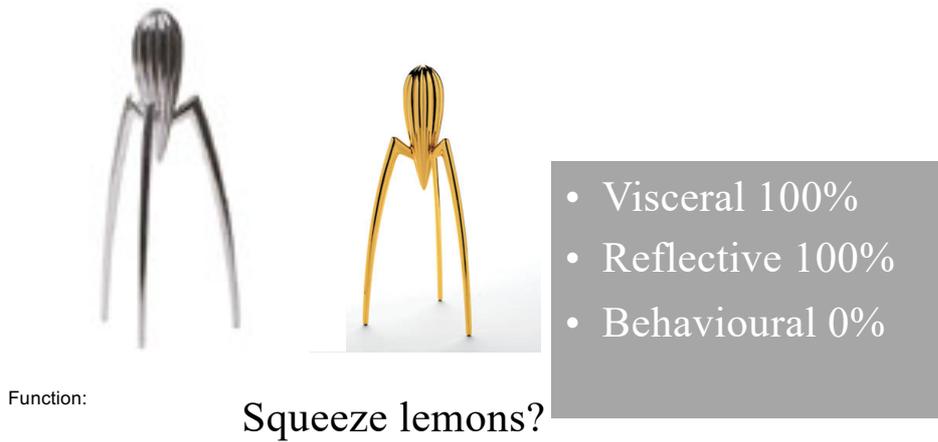
76

My teapots & kettles today



77

“Juicy salif” Philippe Starck



My juicer is not meant to squeeze lemons: it is meant to start conversations...

78

Satisfaction

Satisfaction

Product must be
life-enhancing, rewarding

Usability

Functionality

Three facets

- **Aesthetics** -- appealing to the senses -- sight, hearing, feel, taste, smell
- **Associations** -- what does it remind you of ? What does it suggest ?
- **Perceptions** -- what is your reaction to it ? How does it make you feel ?

79

- Design – assumes alternatives
- Some forms have not changed overtime- knife, alternative to utilitarian functions not easily found.
- Reframing problems enables new designs achieving the same function- innovation
- Value: visceral, behavioral, reflective.

80



- s.ahmed-kristensen@rca.ac.uk
- Google scholar saeema ahmed-kristensen

 @SaeemaDesignEng

