

# Human Factors In Intellectual Property Law Disputes

*Marc Green, Ph. D.*  
*Visual Expert Human Factors*  
*Toronto, Ontario*



## **A Tale Of Cars & Cat Food**





## Cases & Issues

*Visual Confusion*



v.



*Visual Confusion*



v.



*Name Confusion*



v.



*Name Confusion*



v.



## Sources of Dispute

- Confusion;
- Acquired Meaning;
- Distinctiveness;
- Dilution; and
- Tarnishment.



## Color Is In The Head



## Why Confusion?

- Memory is worse than you know;
- Attention is limited (*focal v. automatic*);
- Context is (almost) everything.



### Color Confusion Numbers

- 1,000,000 colors;
- 7,200 color names;
- 150 distinct hues;
- 17 hues in memory; and
- 11 color categories.

Hue	
Brightness	
Saturation	

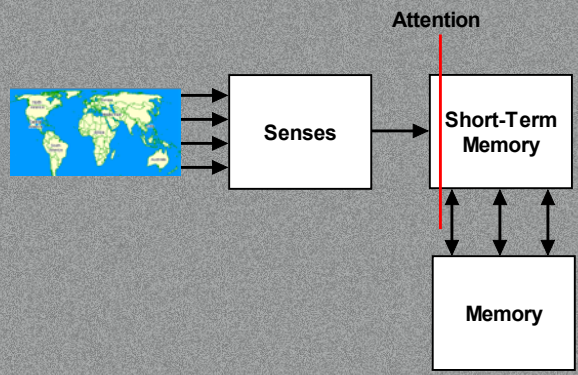
Achromatic	
Primary	
Secondary	

### Color Memory Stinks






### One Slide Psychology Course

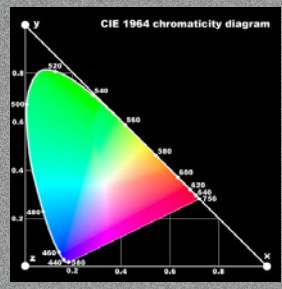


The diagram illustrates the Information Processing Model. It shows a flow from left to right. On the far left is a small image of a world map. Three arrows point from this map to a box labeled "Senses". An arrow points from the "Senses" box to a box labeled "Short-Term Memory". A vertical red line labeled "Attention" is positioned to the left of the "Short-Term Memory" box, with a red arrow pointing from the label down to the line. Below the "Short-Term Memory" box is another box labeled "Memory". Three vertical double-headed arrows connect the "Short-Term Memory" box and the "Memory" box, indicating bidirectional flow.

*Information Processing Model*


 **Visual Expert** Human Factors

### Protecting Color Space



The diagram shows a CIE 1964 chromaticity diagram, which is a triangular plot of color space. The vertices are labeled x, y, and z. The x-axis is horizontal, and the y-axis is vertical. The diagram is filled with a color gradient from blue at the top to red at the bottom. The text "Shade Confusion" and "Color Depletion" is written to the right of the diagram.


*Shade Confusion*  
*Color Depletion*

 **Visual Expert** Human Factors





**Color v. Shape**

*Round*  
*Square*  
*Green*  
*Blue*





**Visual Confusion**


  


*RaceTrac*

v.

*Fastrac*





## Functionality Definitions

Definitions of Functionality:

**Traditional:** "if it is essential to the use or purpose of the article or if it affects the cost or quality of the article"

**Utilitarian:** "the exclusive use of which would put competitors at a significant non-reputation-related disadvantage."

(Traffix Devices, Inc. v. Marketing Displays, Inc)

## Color Functionality

Visibility



Conspicuity



Meaningfulness



(Ambrit v. Kraft)

Space/Size



(Brunswick Corp v. British Seagull)



## Visual Confusion



v.



Hershey Candy Co.

EFFEM

## Psychology Experiment

- In Context;
- Doesn't direct attention;
- Direct measure of likely damages; and
- Real confusion, not possible confusion;



**Name Confusion**



v.



*Terra Boots*

*Nike Terra*

**Word Context**



*“Could you get my check  
I left it at the bank?”*



*“Could you get my rod,  
I left it at the bank?”*



## People Contextualize Meaning

“...under the uncontrolled conditions we loosely call ‘everyday life,’ multiplicity of meaning abounds...We navigate daily through a sea of potential ambiguities, resolving them so easily that we seldom even notice that they are there. We resolve the potential ambiguities by taking into account the contexts in which they occur.”

-George Miller

## Retail Contexts





### Name Confusion



v.



**Stongard**

**Scotchgard**

### BIGRAM Similarity (DICE)

STONGARD	SCOTCHGARD
_S	_S
ST	SC
TO	CO
ON	OT
NG	TC
GA	CH
AR	HG
RD	GA
D_	AR
	RD
	D_

SHARED
_S
GA
AR
RD
D_

Shared Bigrams= 10  
Total Bigrams= 20  
Bigram Score = 50%



### **Further Reading**

- [www.visualexpert.com](http://www.visualexpert.com)
- Jacob Jacoby The Psychological Foundations of Trademark Law: Secondary Meaning, Acquired Distinctiveness, Genericism, Fame, Confusion and Dilution. *The Trademark Reporter*, Vol. 91, 2001.

### **Take Home Message**

1. *"When you believe in things that you don't understand, then you suffer"* - L. Steven Wonder
2. *Surveys are not very good.*