

**OUTDOOR LIGHTING**  
and doorchimes, heath zenith

**HEADSETS AND PHONES**  
headset design, plantronics

**HEAD WORN PRODUCTS**  
splash shield, moldex-metric

**HEAD WORN PRODUCTS**  
dental splash shield, visor frames

**HEAD WORN PRODUCTS**  
speculative products

CONSUMER PRODUCTS  
MICHAEL DAVIS  
INDUSTRIAL DESIGNER

909-379-4477

All products designs, copyright, Michael G. Davis, 1991-2012

## OUTDOOR LIGHTING and doorchimes, heath zenith



MICHAEL DAVIS INDUSTRIAL DESIGNER 1998  
SECURITY LIGHTING PRODUCTS

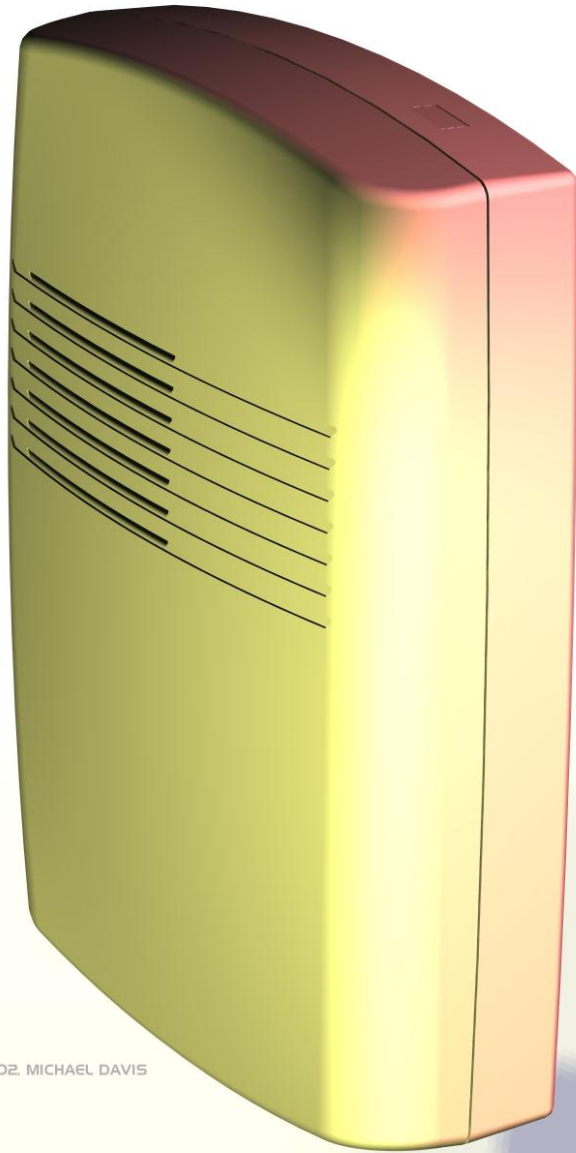


MICHAEL DAVIS INDUSTRIAL DESIGNER 1998

**These three products were manufactured and are still being sold at Lowes, Home Depot and Ace Hardware. The lighting products use different combinations of parts to provide a line of different products for each retailer.**

**Motion Lights, Lowes, Ace Hardware, Home Depot**

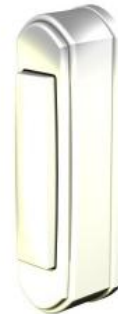
# OUTDOOR LIGHTING and doorchimes, heath zenith



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michael davis industrial designer 1999

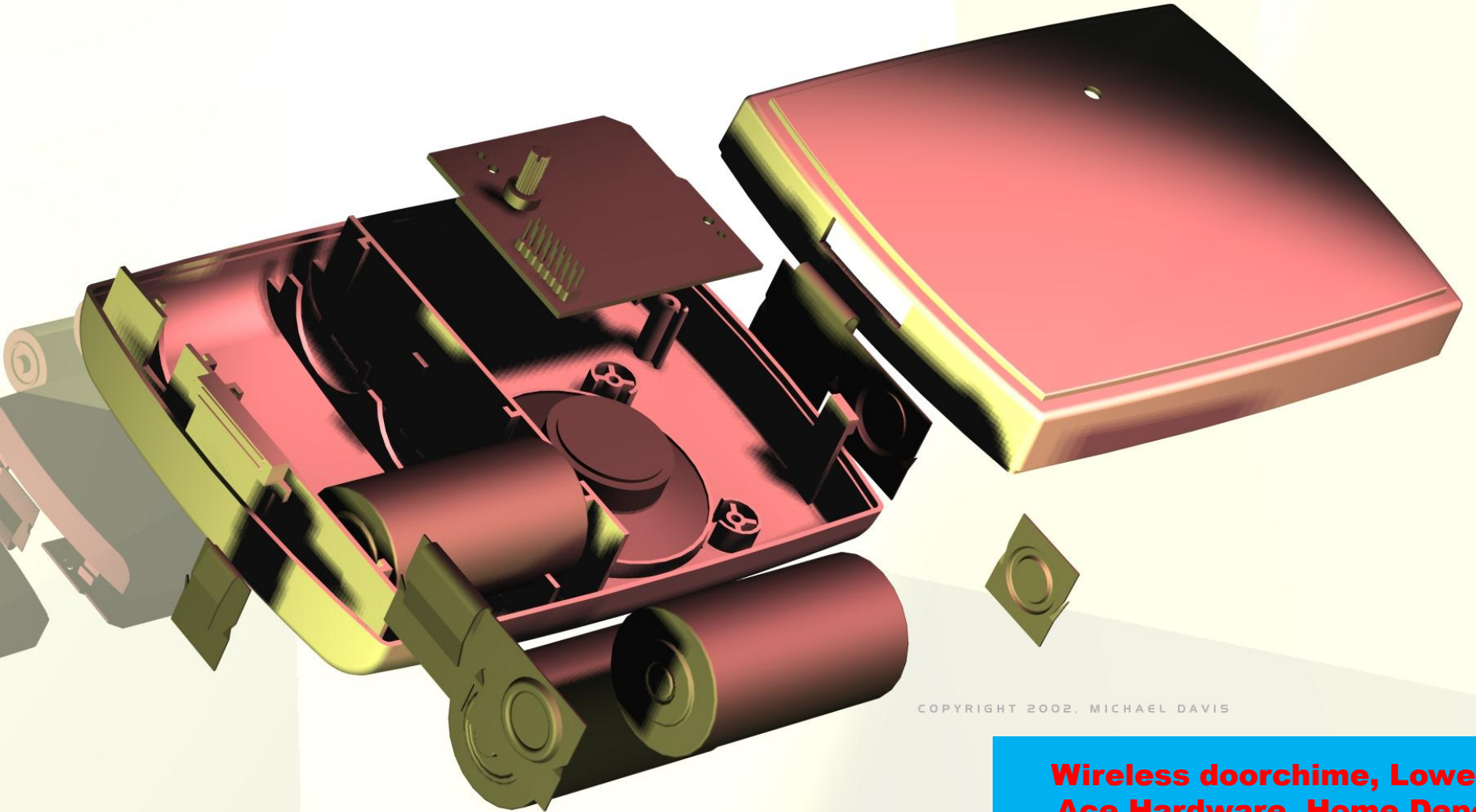


**Wireless doorchime, Lowes,  
Ace Hardware, Home Depot**

M I C H A E L D A V I S I N D U S T R I A L

D E S I G N E R 1 9 9 9

**OUTDOOR LIGHTING**  
and doorchimes, heath zenith



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**Wireless doorchime, Lowes,  
Ace Hardware, Home Depot**

**OUTDOOR LIGHTING**  
and doorchimes, heath zenith



**Door chime concepts, Heath Zenith**

**OUTDOOR LIGHTING**  
and doorchimes, heath zenith



Michael Davis Dec 1999

**Fluorescent concepts,  
Heath Zenith**

M I C H A E L D A V I S I N D U S T R I A L D E S I G N E R



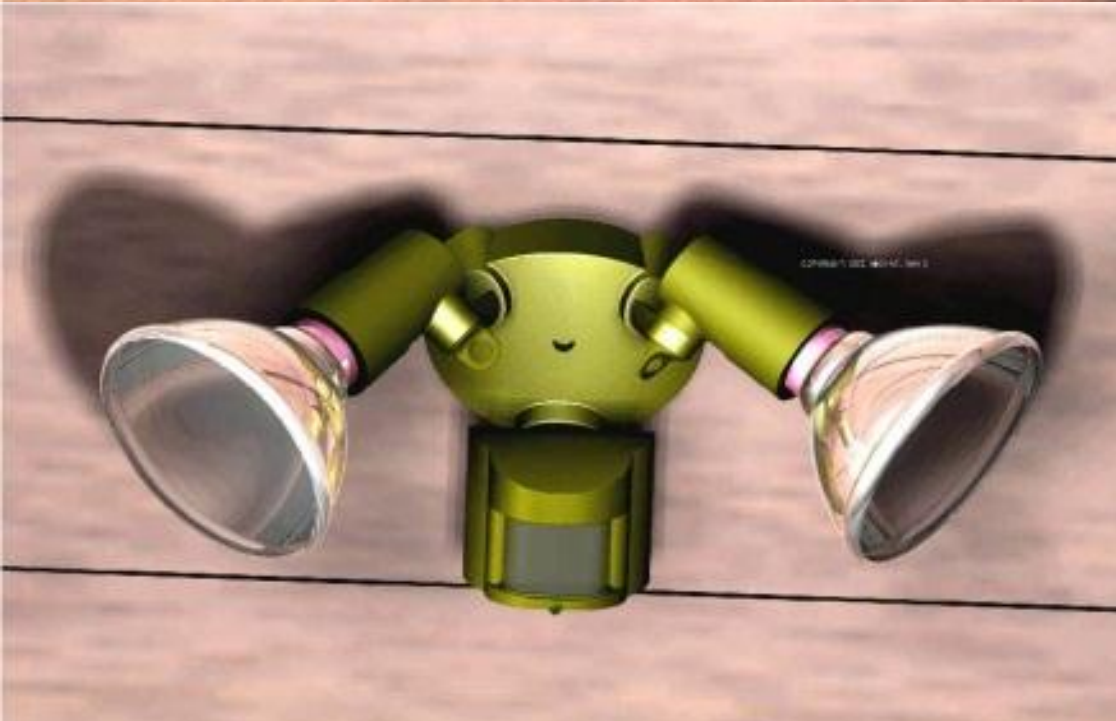
Copyright 2002, MICHAEL DAVIS

**HID porch light**

SECURITY LIGHTING PRODUCTS



**OUTDOOR LIGHTING**  
and doorchimes, heath zenith

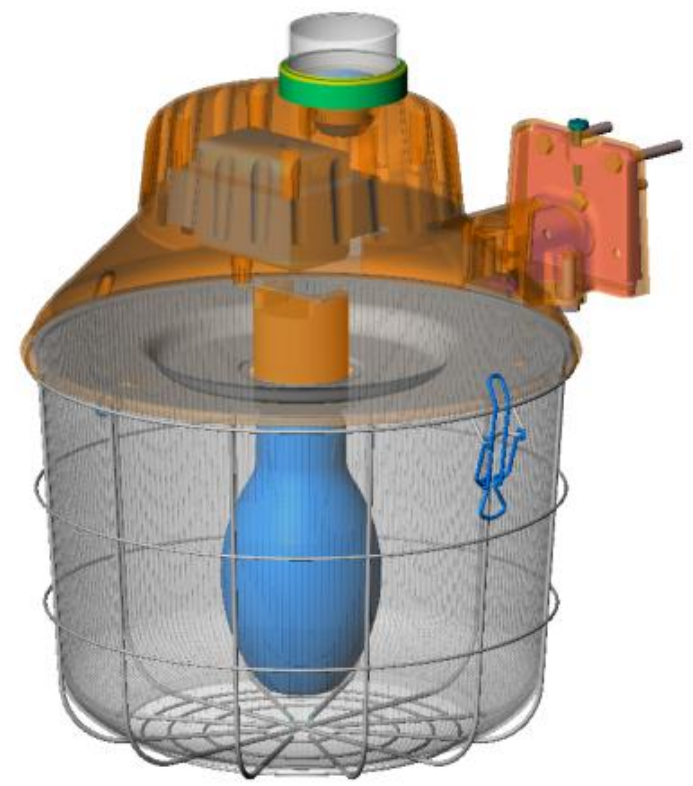
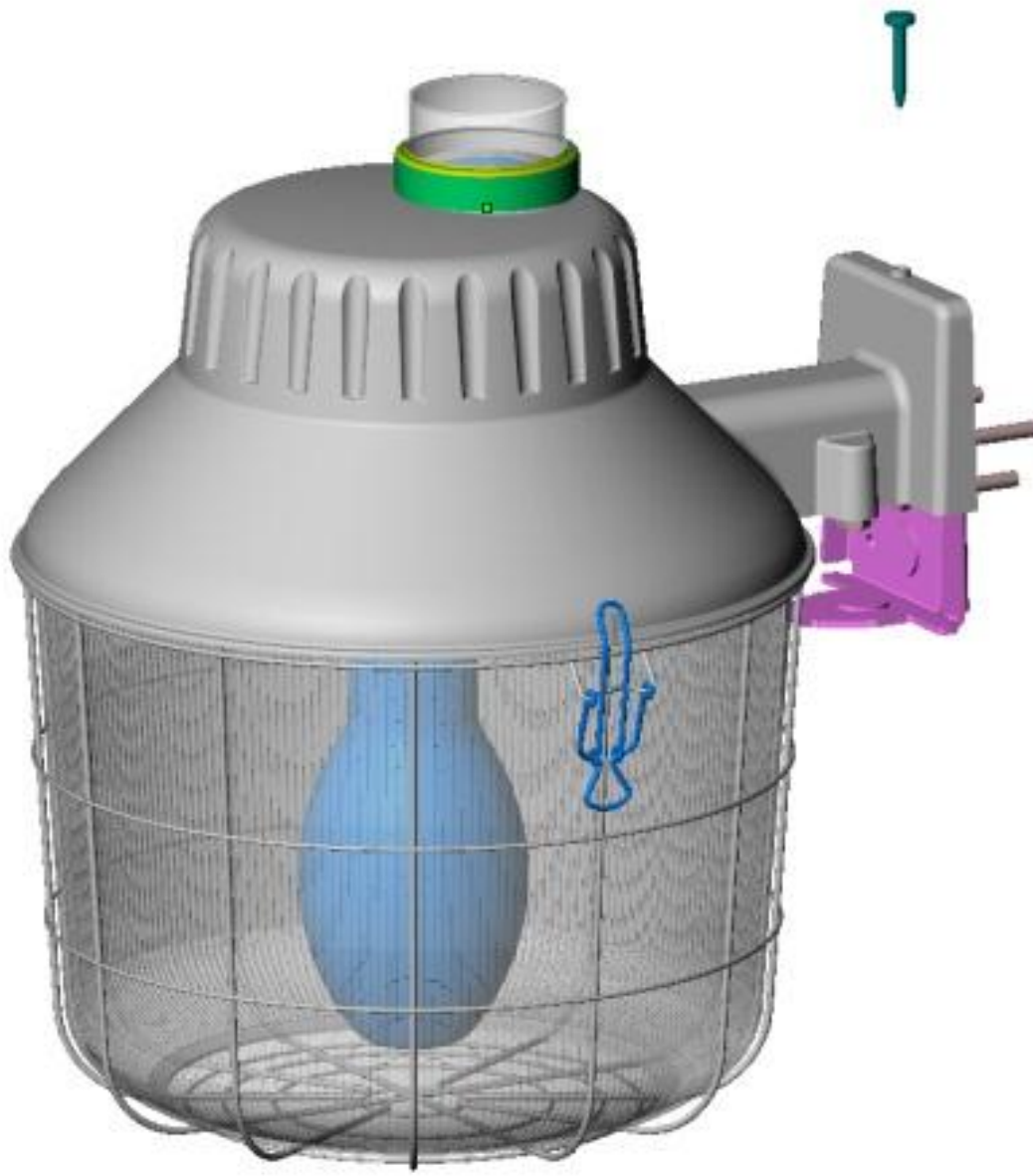


**Motion security lighting**



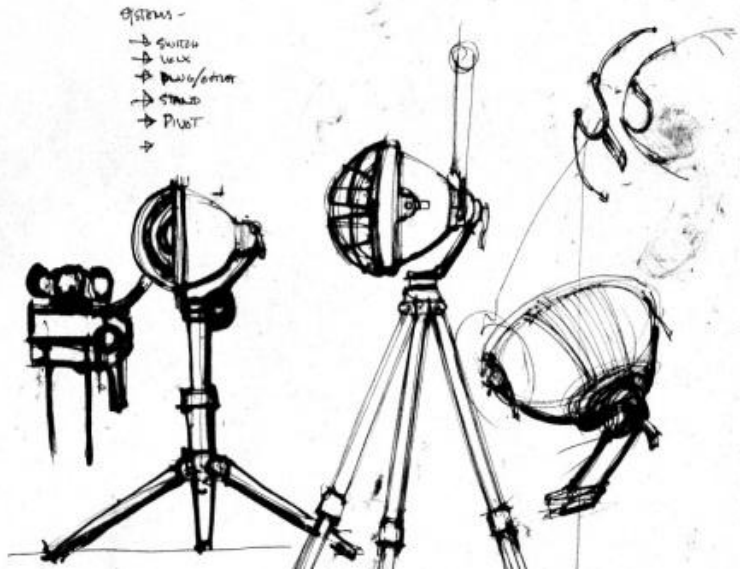
MICHAEL DAVIS INDUSTRIAL DESIGNER 1998

**OUTDOOR LIGHTING**  
and doorchimes, heath zenith



**HID dusk to dawn fixtures**

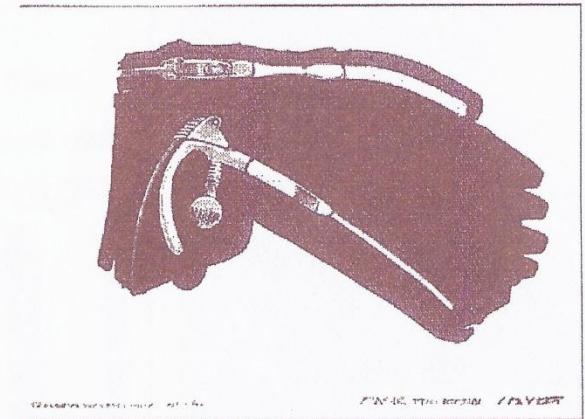
# OUTDOOR LIGHTING and doorchimes, heath zenith



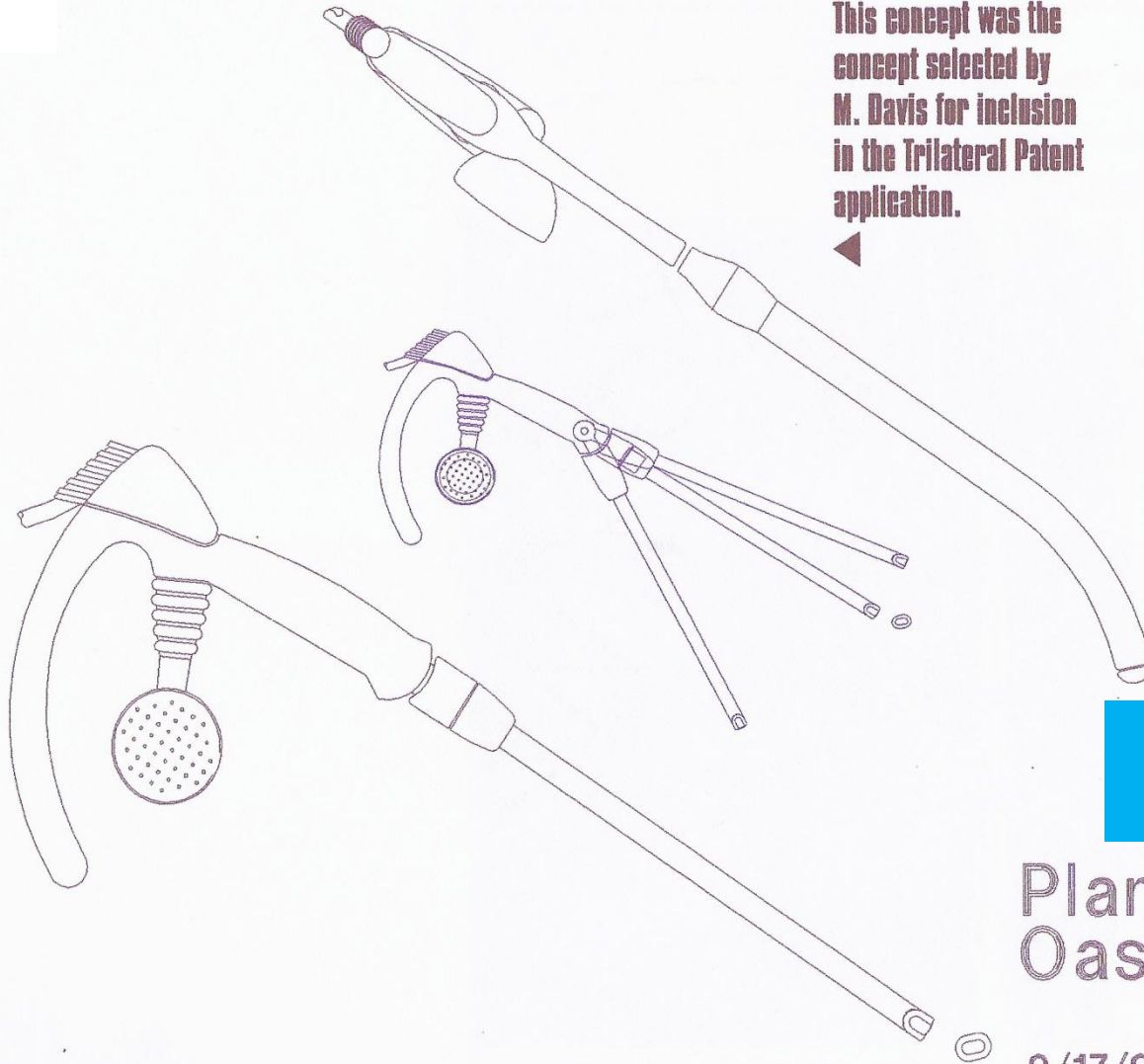
Michael Davis  
Copyright August 1999

**Worklights**

This concept was the  
concept selected by  
M. Davis for inclusion  
in the Trilateral Patent  
application.



▲ One of the many concepts sketched for evaluation



Oasis Project  
(prototype to Tristar)

Plantronics  
Oasis

9/17/92  
M. Davis

# HEADSETS AND PHONES

## headset design, plantronics



US005761298A

**United States Patent** [19]  
**Davis et al.**

[11] **Patent Number:** 5,761,298  
 [45] **Date of Patent:** Jun. 2, 1998

[54] **COMMUNICATIONS HEADSET WITH UNIVERSALLY ADAPTABLE RECEIVER AND VOICE TRANSMITTER**

[75] **Inventors:** Michael G. Davis, Dallas, Oreg.; David G. Harting, Needham, Mass.; Scott F. Barr, Felton, Calif.; Robert V. Davies, Scotts Valley, Calif.; Robert J. Bernardi, Scotts Valley, Calif.

[73] **Assignee:** Plantronics, Inc., Santa Cruz, Calif.

[21] **Appl. No.:** 658,838

[22] **Filed:** May 31, 1996

[51] **Int. CL<sup>6</sup>:** H04M 1/00; H04R 25/00

[52] **U.S. CL:** 379/430; 381/183; 381/187

[58] **Field of Search:** 379/430, 428, 379/433; 381/183, 187, 68.5, 68.6, 68.7, 69

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 375,959	11/1996	Davis et al.	D14/223
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**FOREIGN PATENT DOCUMENTS**

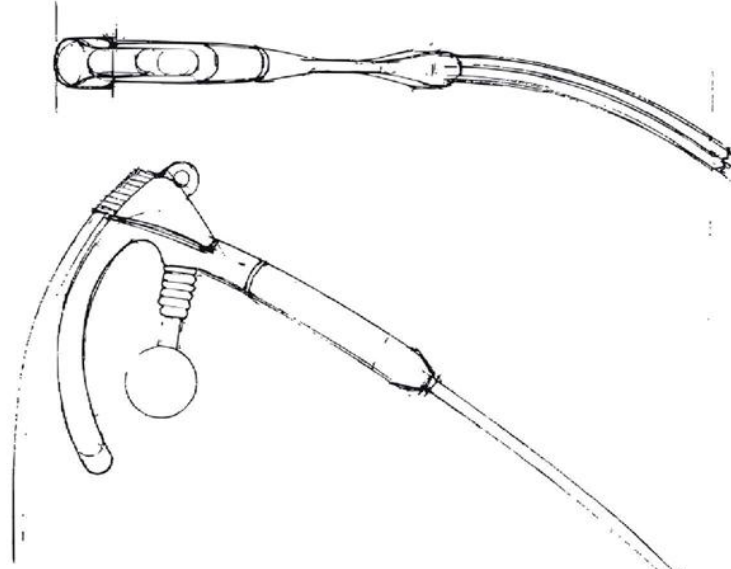
3210034 A1	3/1982	Germany
93 13 223.9	4/1993	Germany

*Primary Examiner*—Jack Chiang  
*Attorney, Agent, or Firm*—Fenwick & West LLP

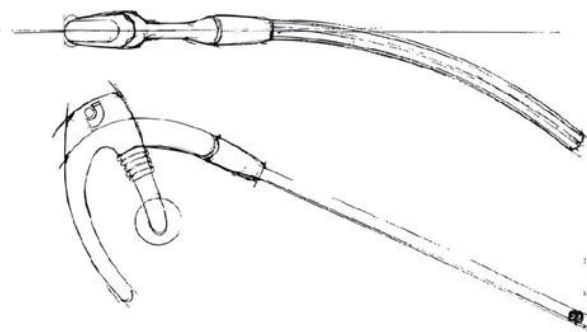
[57] **ABSTRACT**

A communications headset includes a headset enclosure and a receiver enclosure coupled thereto by various means allowing displacement of the receiver enclosure with respect to the headset enclosure at any of a variety of angles, rotations, and distances. The adaptable positioning of the receiver enclosure allows the headset to be used by a wide variety of users having different ear shapes and sizes, while providing a stable, comfortable fit and ensuring good acoustic performance. In one embodiment the receiver enclosure is slidably coupled to a ball tube having a ball that rests in a socket of the headset enclosure. The receiver enclosure can telescope along the length of the ball tube and can rotate about an axis of the tube. The ball can be rotated in the socket to position the receiver enclosure at any of a variety of angles relative to the headset enclosure. A voice transmitter is also coupled to the headset enclosure so as to allow adjustment of length, angular position, and rotation.

6 Claims, 9 Drawing Sheets



m davis industrial designer 1992



michael davis industrial designer 1992

U.S. Patent Jun. 2, 1998 Sheet 8 of 9

5,761,298

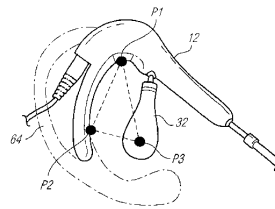


FIG. 9

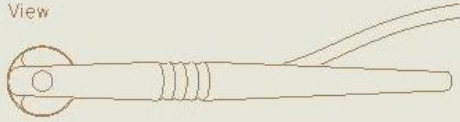


**Tristar headset patent, concepts and product photo**

# HEADSETS AND PHONES

## headset design, plantronics

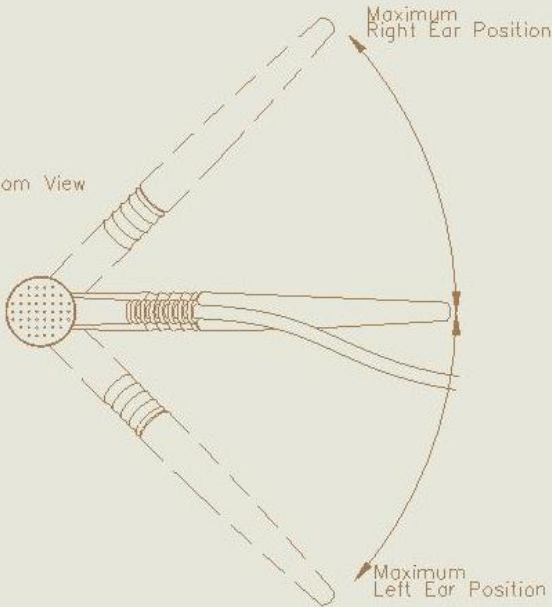
Top View



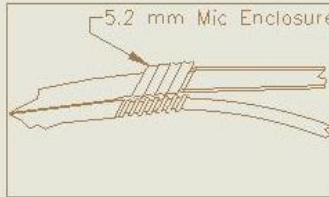
Easy On  
Concept

M. Davis 9/21/92

Bottom View



5.2 mm Mic Enclosure



Maximum  
Left Ear Position

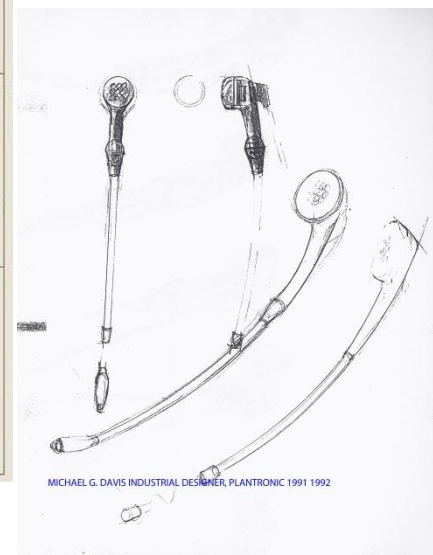
4 mm Mic Enclosure



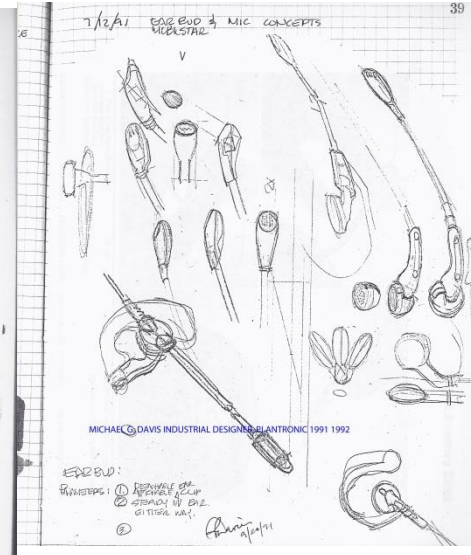
Transparent Boom



MICHAEL G. DAVIS INDUSTRIAL DESIGNER, PLANTRONICS, 1991, 1992



MICHAEL G. DAVIS INDUSTRIAL DESIGNER, PLANTRONIC 1991 1992

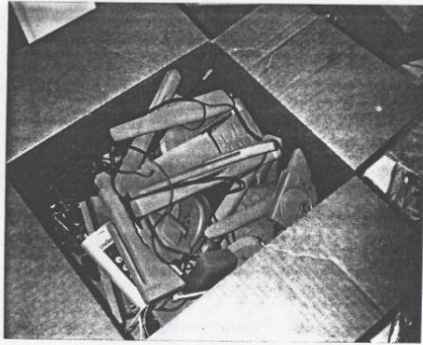


MICHAEL G. DAVIS INDUSTRIAL DESIGNER, PLANTRONIC 1991 1992

**Ez on concha headset early concepts**

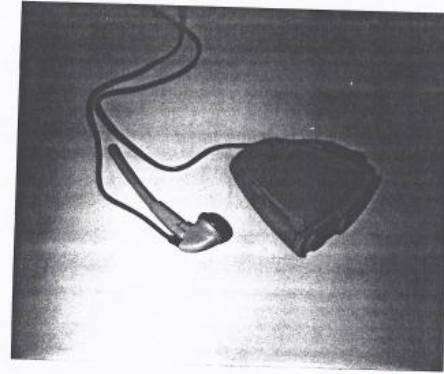
# HEADSETS AND PHONES

headset design, plantronics

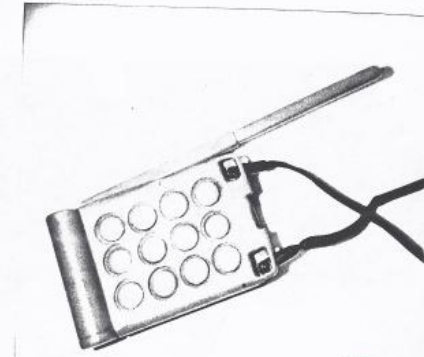


A

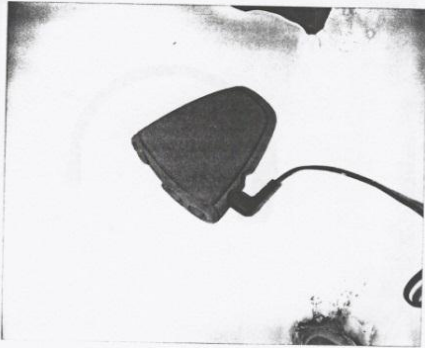
michael davis industrial designer for Plantronics, 1992



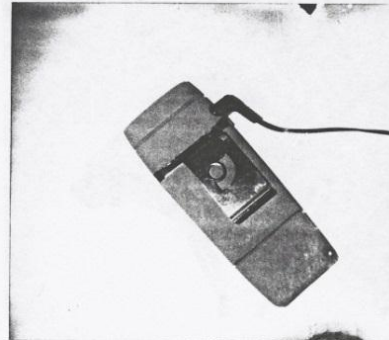
A



B



B



C



C



D

**Hand made foam concepts  
for future products focus  
study**

## Human Factors Study Design and Management

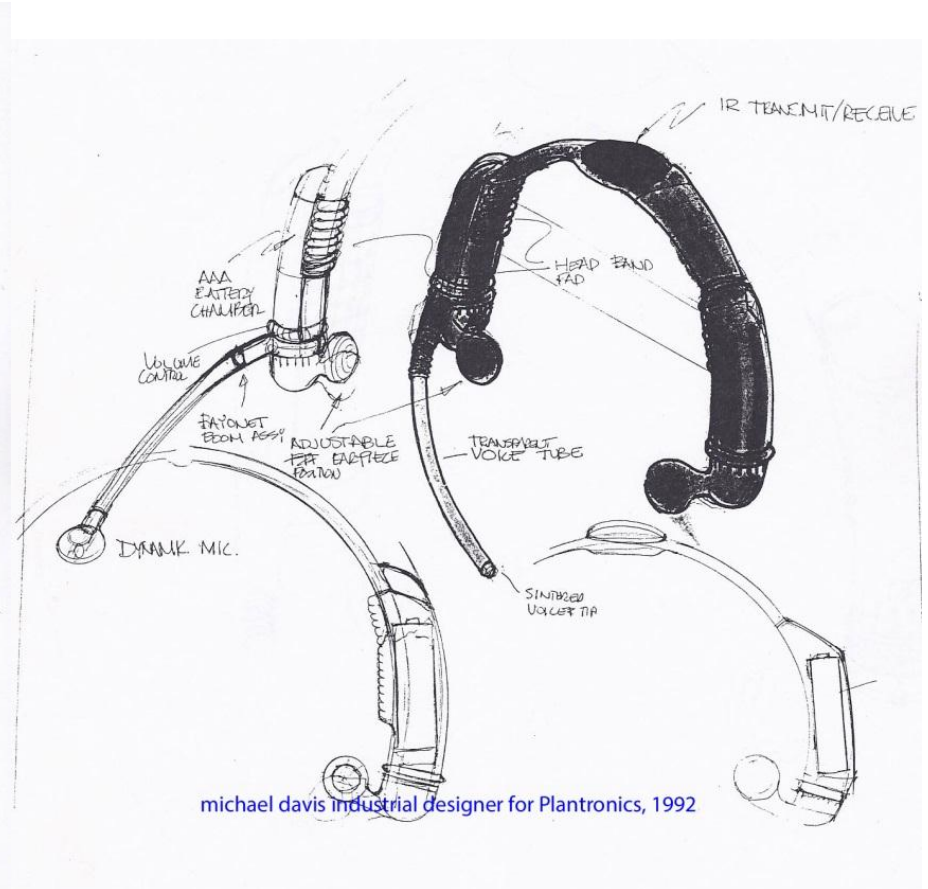
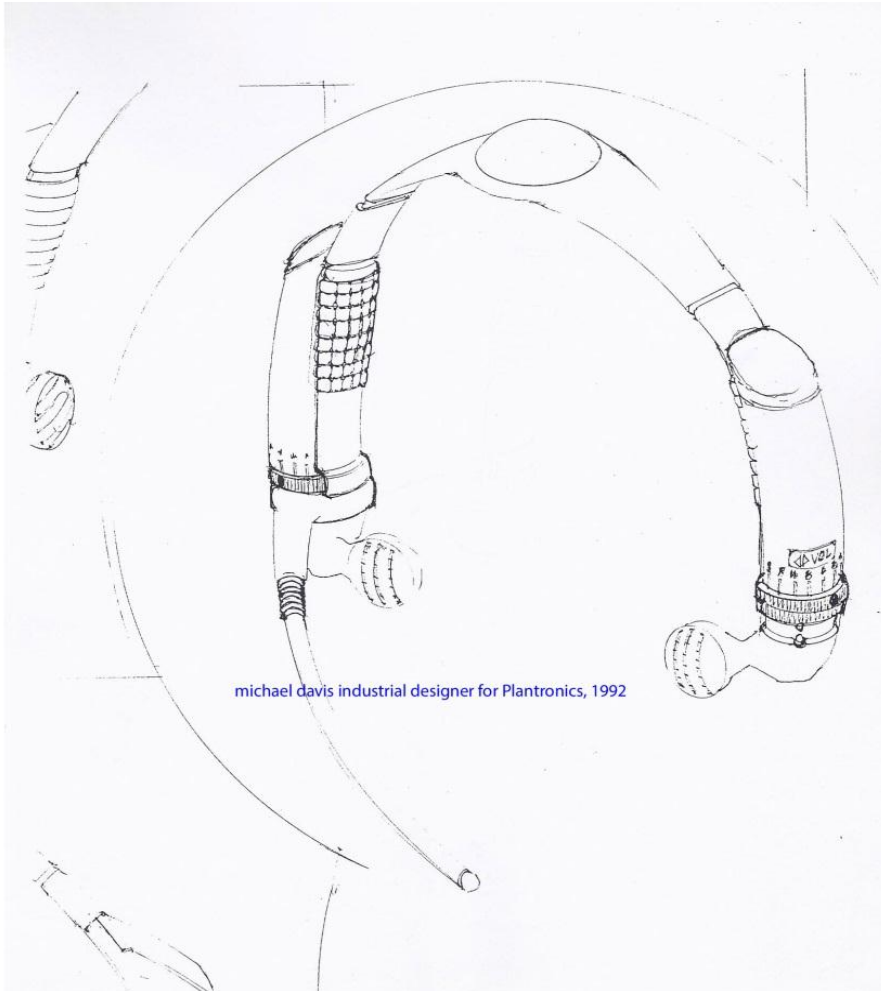
Performed for Plantronics. 1000 subjects, the study utilized full head scanning, full ear molds, and evaluated 5 population groups. The project was sub-contracted to three consulting organizations, Henry Dreyfuss and Associates, NY, BlacksBurg VA Virginia Tech audiology lab and a 3D scanning company in Salt Lake City.



**Representative ear mold for  
managed human factors study**

# HEADSETS AND PHONES

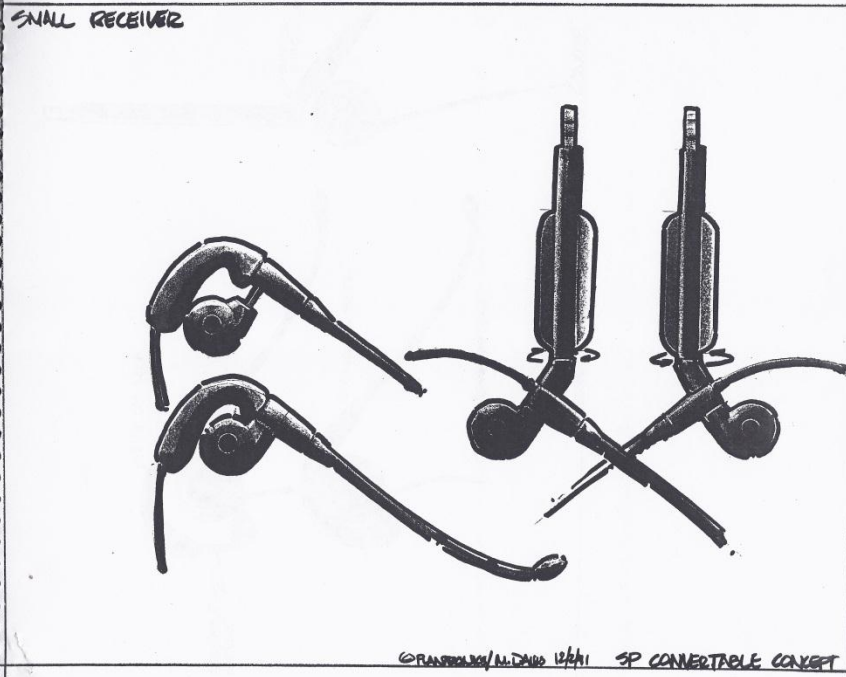
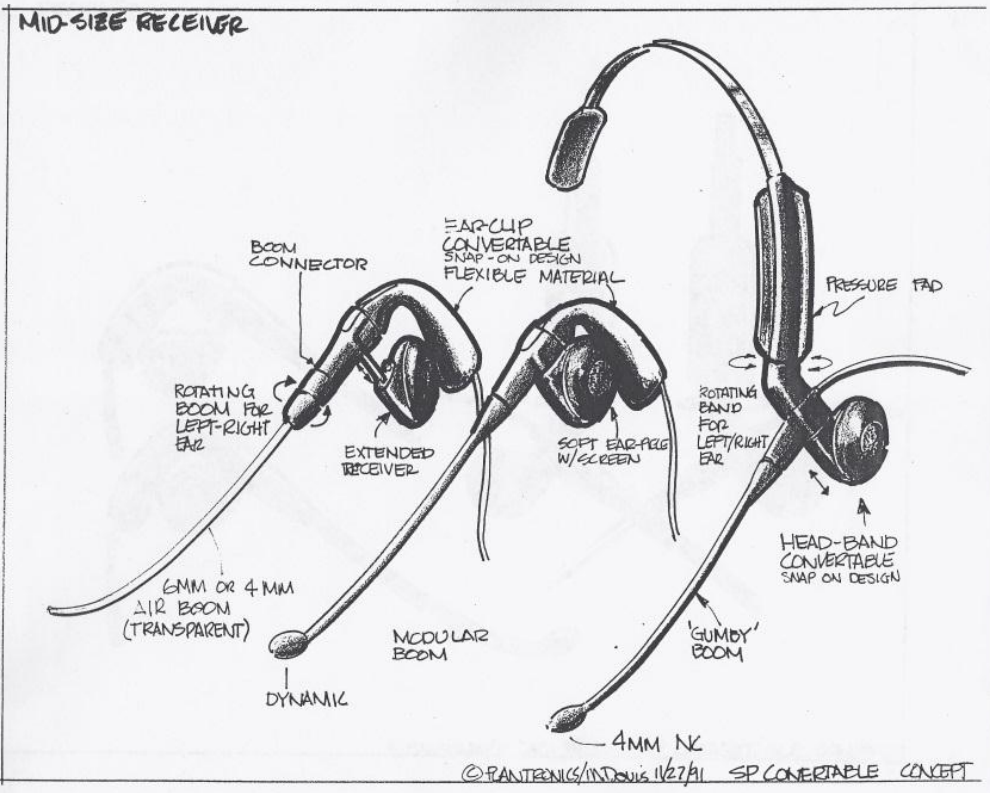
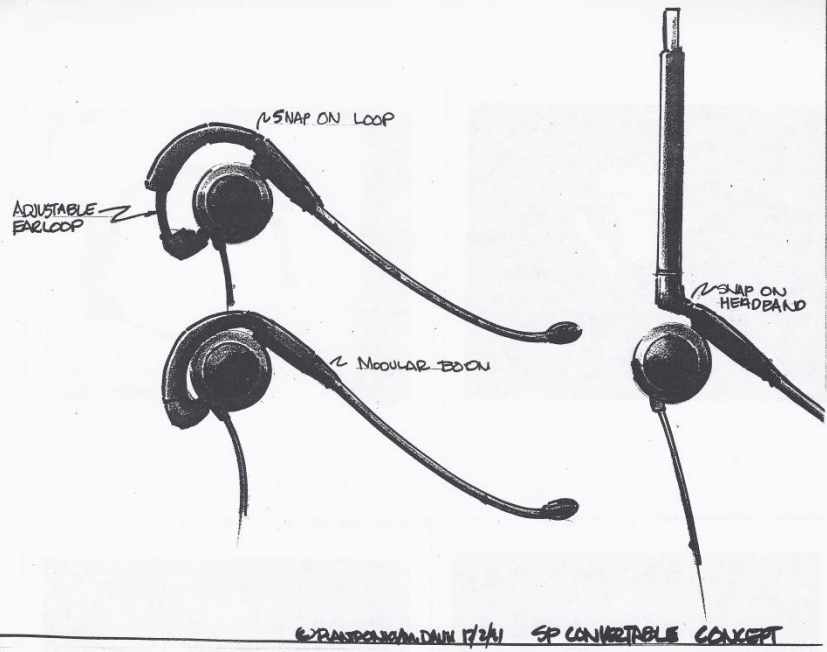
## headset design, plantronics



**Wireless headset, music, radio  
concept sketch.**

# HEADSETS AND PHONES

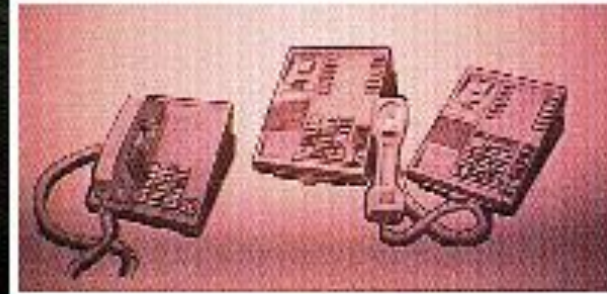
## headset design, plantronics



**A few headset concepts built in later years**

# HEADSETS AND PHONES

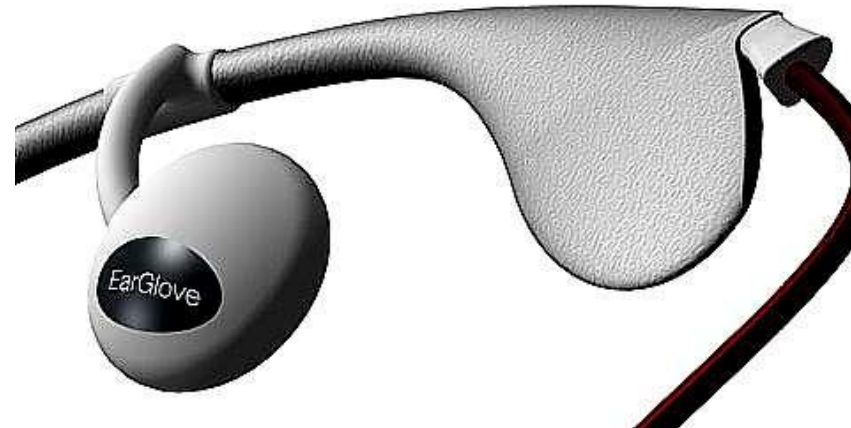
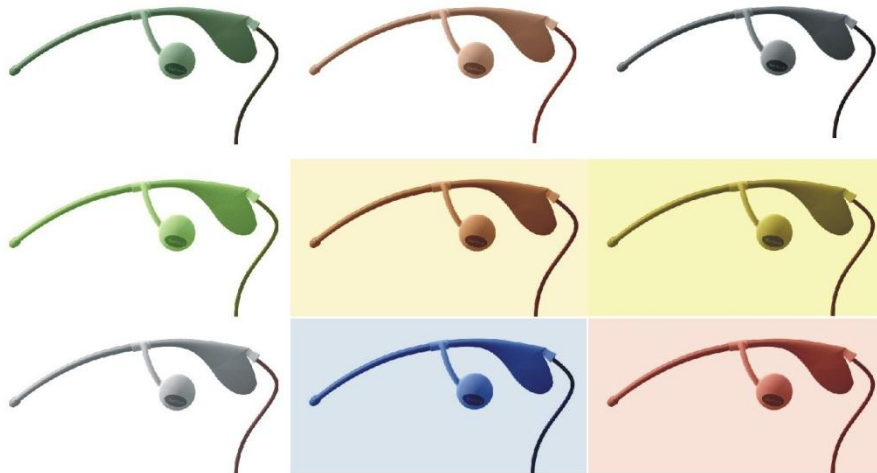
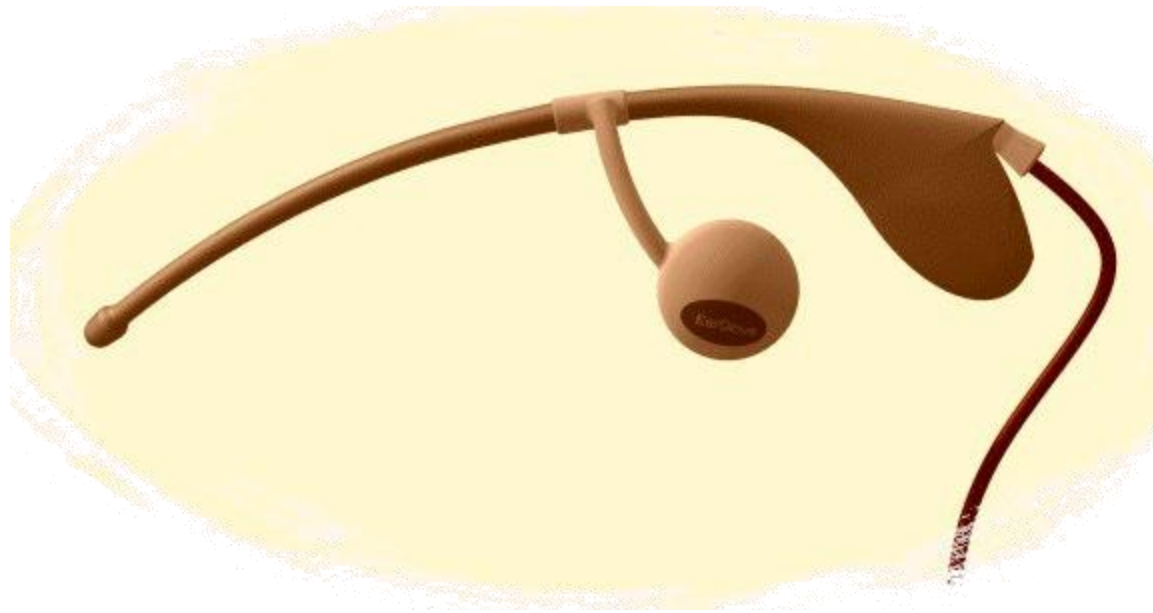
headset design, plantronics



**Clarity hotel phone for  
Plantronics**

# HEADSETS AND PHONES

## headset design

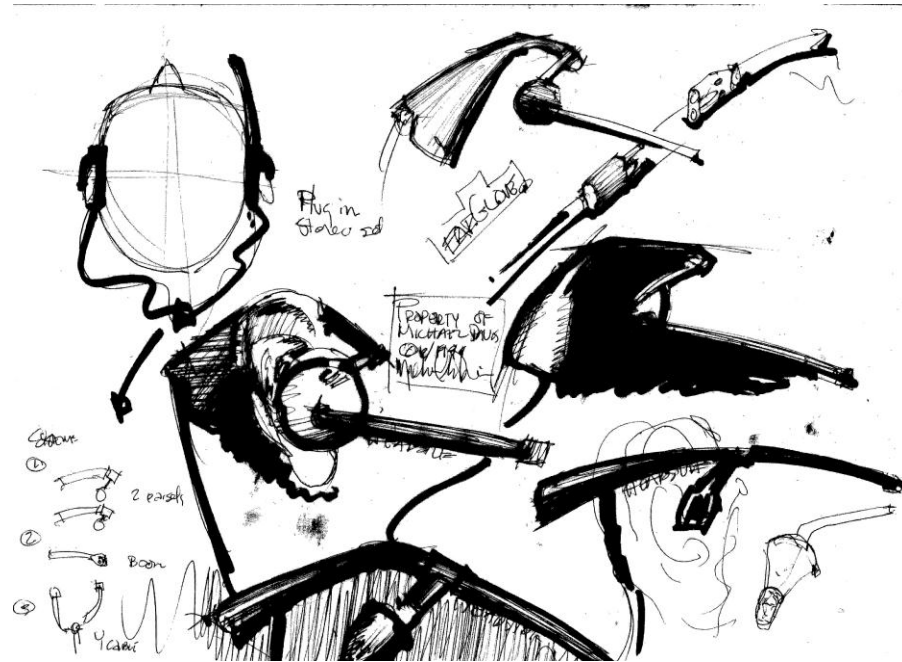


Post plantronics concepts,  
SolidWorks



EarGlove Headset Concepts

Michael Davis Dec 1999



Post plantronics concepts,  
SolidWorks

**HEAD WORN PRODUCTS**  
splash shield, moldex-metric



**Concept, shield**  
**SolidWorks**

**HEAD WORN PRODUCTS**  
dental splash shield, visor frames



**dental  
splash  
protection**

**patented as  
a two piece  
snap-  
together  
molding**

**prototype  
tooling  
completed**

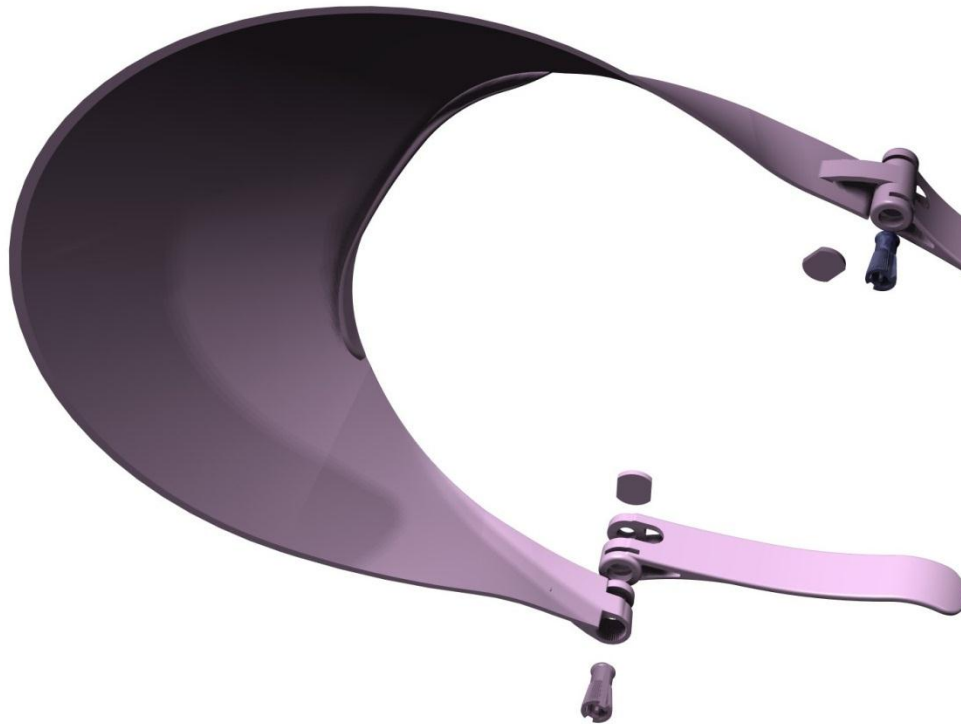
*o p d o p*

*0 4 0 6 0 2*

**Opdop dental shields and consumer  
golf accessories**

**HEAD WORN PRODUCTS**  
dental splash shield, visor frames

**Golf accessories,  
frames for  
fabric  
headwear,  
sun visors.**



**OPDOP**  
EXPLODED VIEW SUNCLICK II

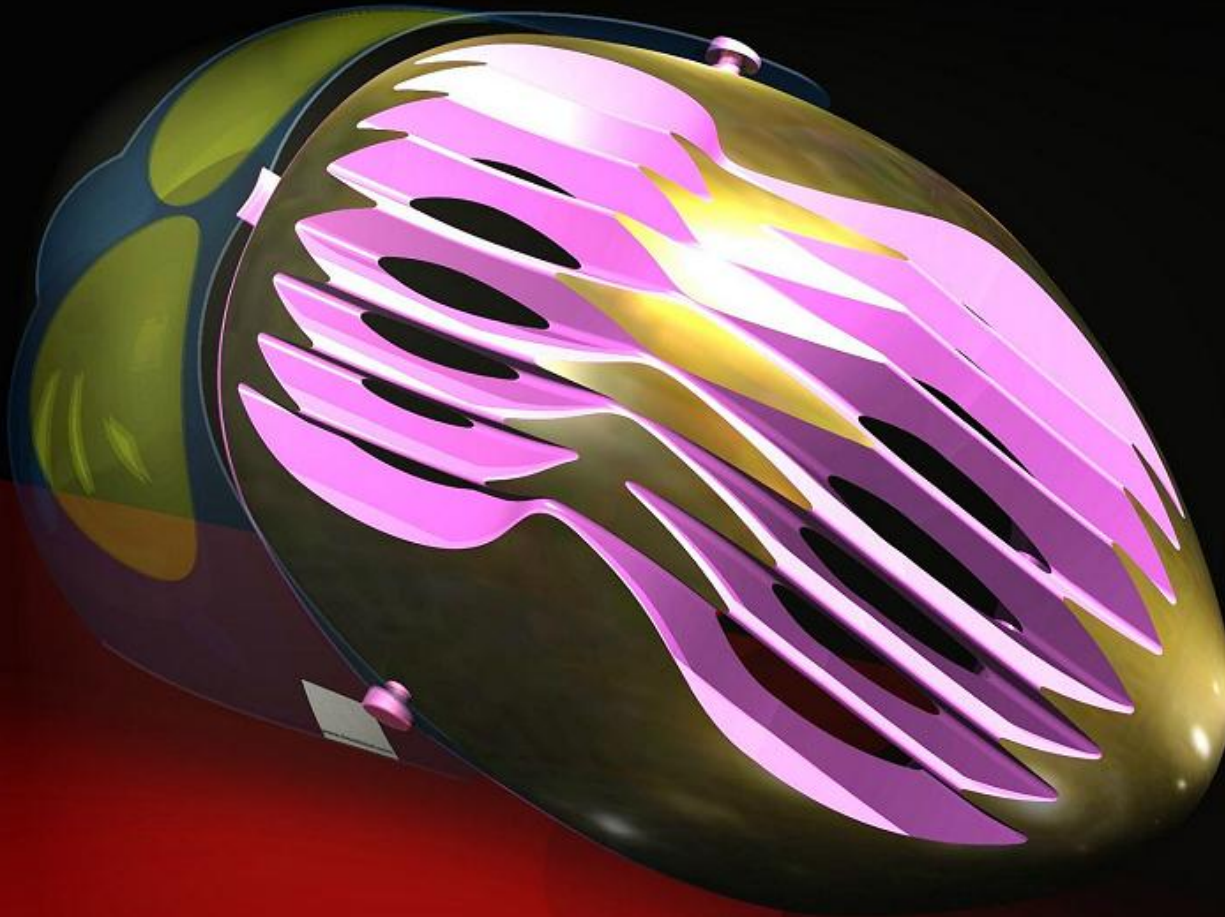
**Opdop dental shields and consumer  
golf accessories**

**HEAD WORN PRODUCTS**  
dental splash shield, visor frames

Frames for  
fabric  
covered sun  
visors.



**Opdop dental shields and consumer  
golf accessories**

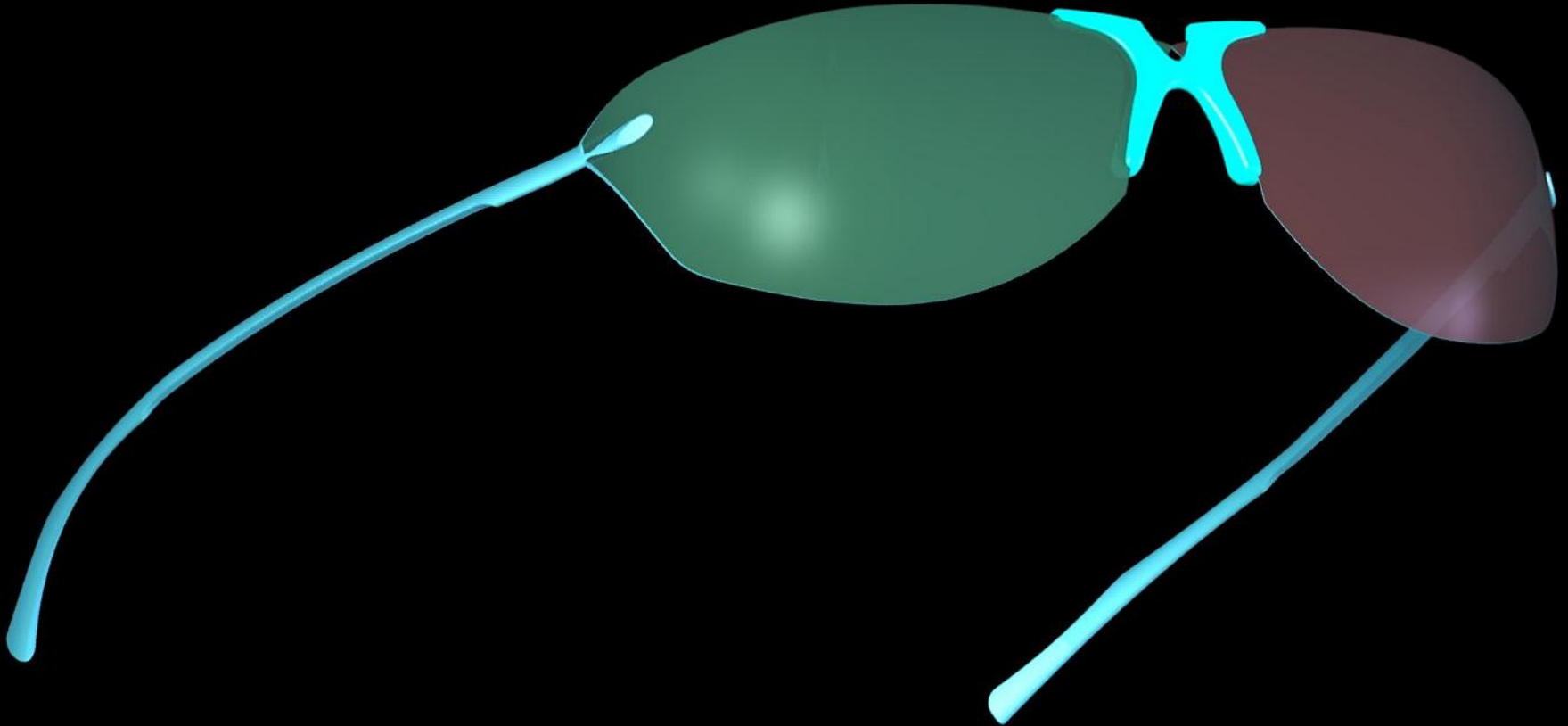


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**Bike helmet and diopter face shield  
reference two market opportunities**

**HEAD WORN PRODUCTS**  
speculative products

3 D V I E W I N G G L A S S E S , S N A P T O G E T H E R D E S I G N



M I C H A E L D A V I S I N D U S T R I A L D E S I G N E R S O L I D W O R K S W O R L D 2 0 0 4

**Movie theatre 3D eyewear guest  
premium**