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Industrial Design Portfolio

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Water Purifier - São Francisco Project

Global product for South American, Mexican and European markets - Developed at supplier in China and Taiwan - Whirlpool 2008



Consul



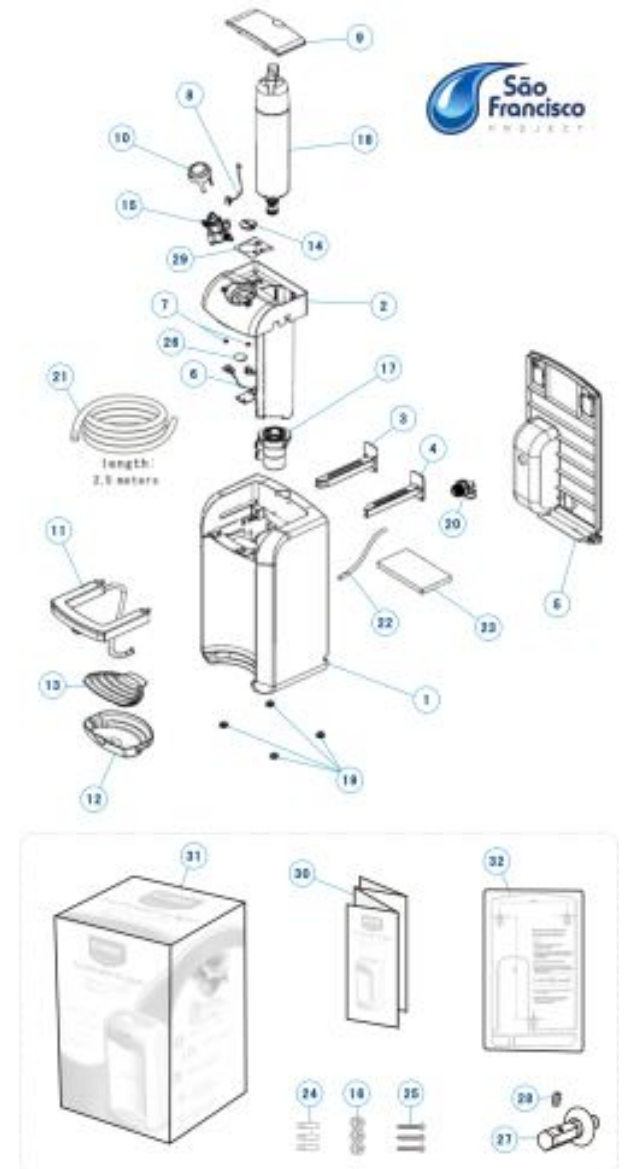
This [Hyper Shot rendering](#) shows the final product.

Cost reduction and parts optimization were the main requirements.

The target to develop a single design solution for two brands was accomplished.

Suitable for Consul and Whirlpool DNA, the differentiation comes out from finish and colors.

The Whole 3D modeling was performed on Pro_engineering simplifying the Interaction with supplier engineers overseas.



Frost Free 1 Door Refrigerator - Atacama Project

Product with freezer compartment inside - Whirlpool 2007



The introduction of a refrigerator with a new feature in its segment should stand out from competition. Keeping the cost low, a built-in handle was modeled over the top cap. Surfaces composition deliver a integrated solution for handle and interface. The internal [frost free panel](#) was conceived to reinforce the performance perception (system is all about forced ventilation).



○ Top Mount Refrigerator - Spider Project

Global Product for South America and Europe - Whirlpool 2006



BRASTEMP

A new design theme for the top mount line.
Modularity concepts were applied to the interface
increasing features combination possibilities over the
same base (among them the [water dispenser](#)).
Low complexity to obtain diverse models.

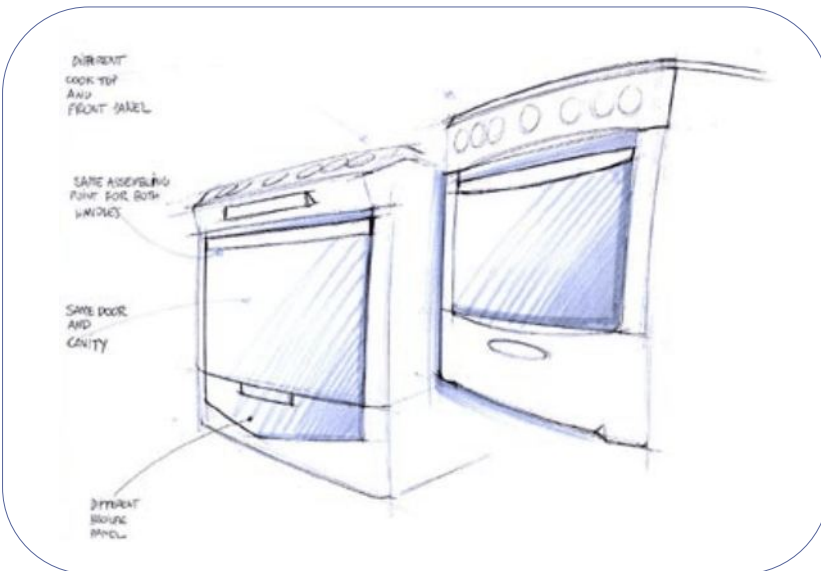
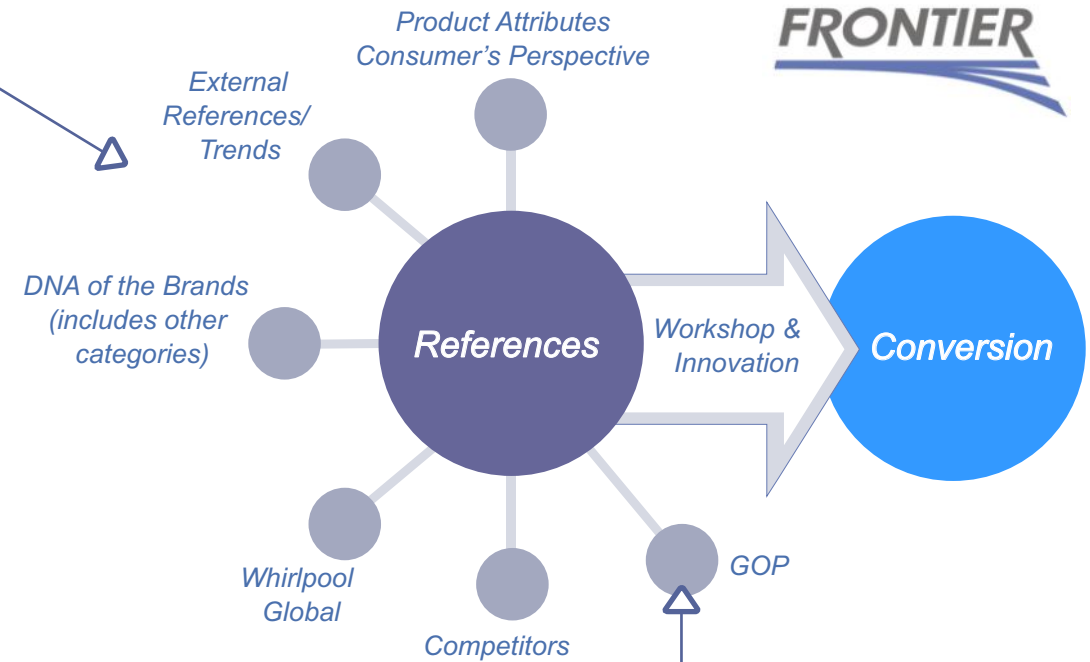


Frontier Project

30 inches platform range - Whirlpool 2004

Development Workflow

The challenge was to create a new modular platform that could be used by American, Mexican and Brazilian brands allowing different features and brand DNA combinations without compromising each region specific needs.



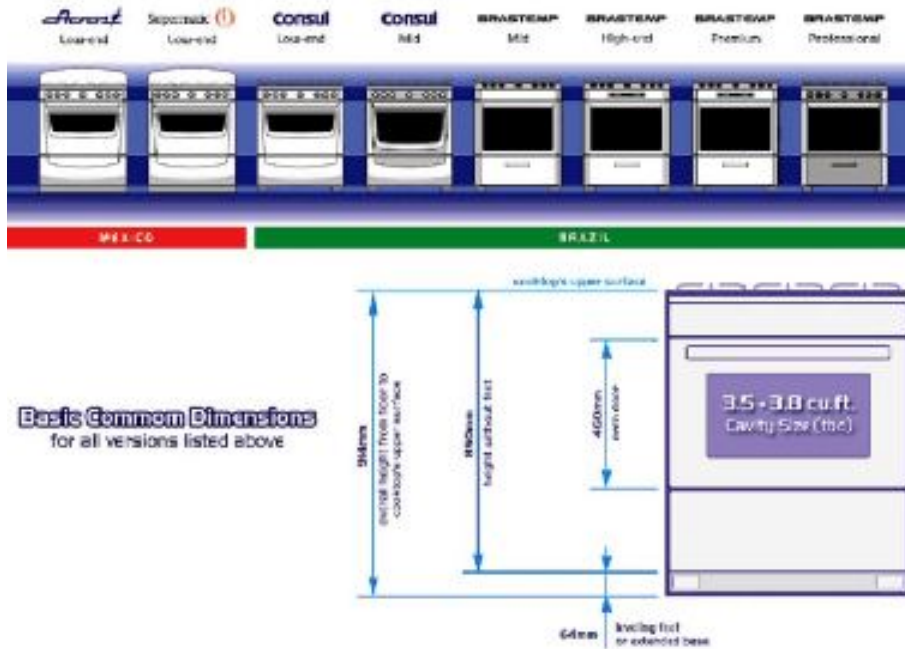
Early studies

Exploring Global Operational Platform possibilities (Workshop with American and Mexican Industrial Designers).

Frontier Project

30 inches platform range - Whirlpool 2004

Eco Plus Platform Scenario

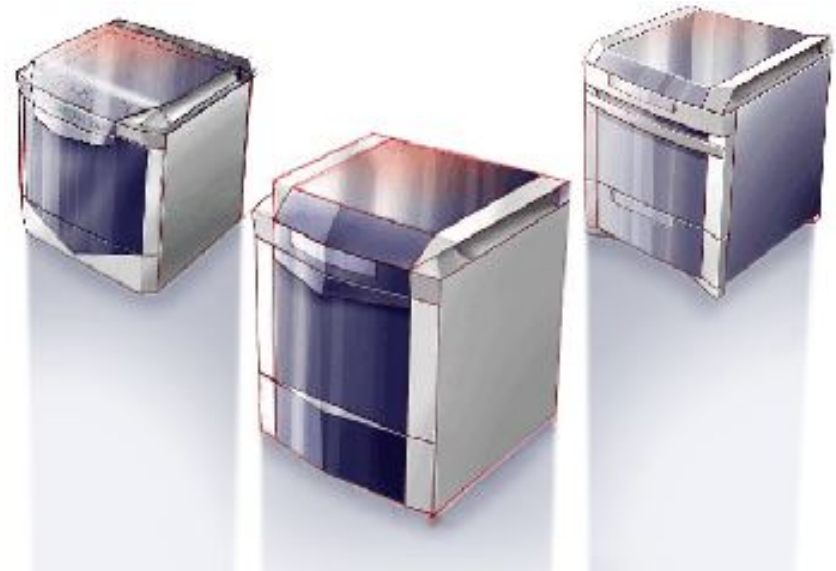


Platform sharing scenario

Considering Brazilian and Mexican SKU's.

Initial sketches based on Brastemp brand DNA

BRASTEMP DNA references



Frontier Project

30 inches platform range - Whirlpool 2004

Mock-up Preparation (images from Pro-E screen)

Fifteen versions were entirely modeled on Pro-Engineering software for fast prototyping and then sent for consumer research.



Version selected on research



Cooktop and grates lay-out studies



Final project adjustments based on research feedback

Working even closer to the Engineering department, all the technical issues were properly addressed in order to preserve the solutions selected by the consumer.

Frontier Project

30 inches platform range - Whirlpool 2004



DNA alignment preview

Visualizing product's future derivations

Catamaran Sport Yatch - Tricat 30

Free lance design development - 2005

Tricat 30
STREAMLINE 3



The challenge was to deliver a solution that could maximize the deck space yet keeping a high performance appeal.



BLUJOI

SEASTORM



TWISTER



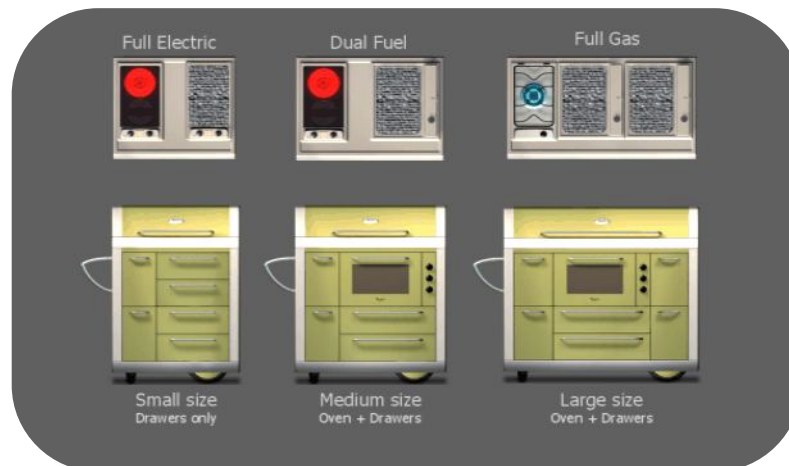
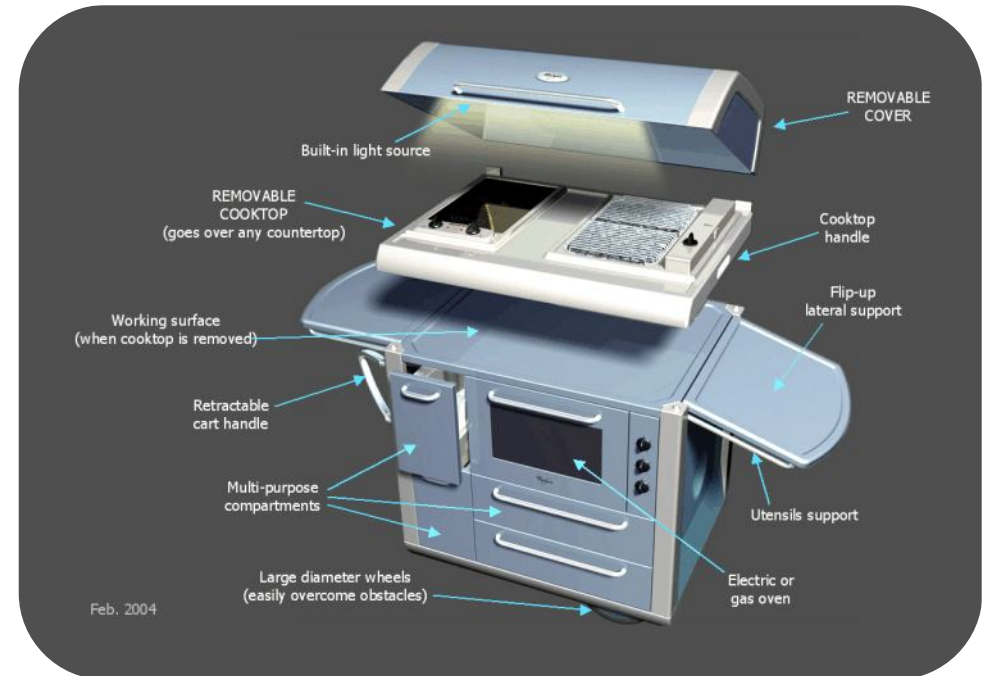
Picture of the first prototype being tested.

Outdoor Cooking

Portable food preparation solution - Whirlpool 2004

In collaboration with Whirlpool's CIT department (Corporate Innovation and Technology) this outdoor cooking device has been developed delivering the following main benefits:

- Removable top for occasional indoor use.
- Modular concept - flexibility on product's configuration.
- Space saving solutions when not in use.



Jobim Project

24 inches Platform Range - Whirlpool 2002



New Brastemp brand platform wider than any other 4 burner range available on the local market. New and innovative features, an electronic control and a very attractive appeal were the main requirements.

BRASTEMP



Early studies

Exploring aesthetics and new features. Introducing "knobs-on-the-cooktop" concept.

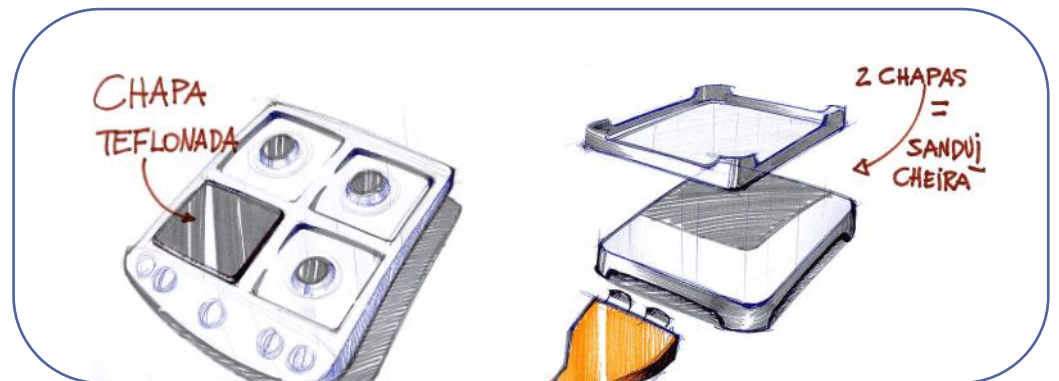
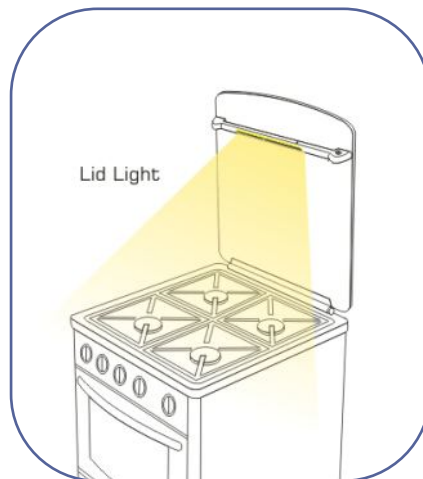
Jobim Project

24 inches Platform Range - Whirlpool 2002



Features Exploration

Some workshops were performed in order to create new and appealing features to increase product's attractiveness.



Jobim Project

24 inches Platform Range - Whirlpool 2002



◀ Production version

Image selected
for Alias/Wavefront
rendering contest.

Brastemp Modular Kitchen

Customized furniture solution to support Brastemp appliances - Whirlpool 2001

Article published on Casa Cor Magazine - São Paulo



The main requirement was to develop a modular system that could support any of the current Brastemp kitchen appliances also motivating their sales. This concept should consider stainless steel framing and flexibility also for finish customization.

Module example (exploded view)

The side frame concept allows the composition of modules with different widths, with or without shelves and drawers and specific appliance support according to consumer needs. For the blue parts shown, consumer can also choose the finish to match his kitchen environment. Among the options are: wood, plain color of his choice and the standard stainless steel.

Modularity study

Using only three variations of side frame, all the products can be properly placed considering a wide variety of combos.



Brastemp Modular Kitchen

Customized furniture solution to support Brastemp appliances - Whirlpool 2001



Example of modules composition with dark wood finish

Alias Studio modeling and rendering

Article published on Brazilian major magazine ISTOÉ on February 2001

CIENCIA & TECNOLOGIA

CONFORTO Sistema controla a luz e o som ambiente; no banheiro, o piso é aquecido e o vidro se torna opaco

TECNOLOGIA

Luxo e mordomia

Condomínio terá piso aquecido e a banheira liga avisando quando o banho está pronto

DARLENE MENDONÇA

No caminho do trabalho para casa, o morador seleciona para o mural de sua banheira. Pelas telas do telefone celular, ele escolhe a temperatura e a quantidade de sais e essências que deve ser despejada. Quando a água atinge o nível máximo, a própria banheira não se deixa transbordar. Liga de volta para o dono da casa e, com uma voz sintetizada, informa que o banho está pronto. Para não correr o risco de pegar um resfriado, o dono da casa também pode regular o temperatura do piso. Ainda no banheiro, em vez de fechar a cortina para guardar sua intimidade, ele só aperta um botão que aciona uma janela inteligente. Ali, uma película opaca recobre a superfície transparente do vidro como se fosse uma tela de cristal líquido.

Parece sonho? Não para quem estiver disposto a desembolsar R\$ 2 milhões por uma das 12 casas do condomínio que será lançado esta semana no Morumbi, na zona sul de São Paulo. Capitanado por Leonardo Senna, importador dos carros Audi e irmão do

piloto Ayrtton, o projeto da I-House (casa inovativa) é um primor em mordomias. "Buscamos reunir num só lugar todo tipo de tecnologia para o conforto doméstico", explica Senna.

O que mais deve encantar as donas-de-casa é o sistema central de sucção de poeira. Adeus aspirador de pó com mil peças. Em cada cômodo há um bocal para encaixar a mangueira do aspirador. Em vez de esconder o pé debaixo do tapete, os preguiçosos podem varrer até o bocal e despejar a sujeira. Para

COZINHA Fogão sem área para picar legumes, bater biscoitos e resfriar panelas

abrir a porta não é preciso chave. Basta encostar o dedo na fechadura com leitor de impressão digital. Assim como outras casas ditas inteligentes, em todos os cômodos há conexões para telefone, TV a cabo e internet em alta velocidade. Com 600 metros quadrados de área construída, a casa terá sistema elétrico para controlar vários aparelhos a partir do interruptor de luz. Um memorizador guarda as preferências de cada morador. Quem chegar em casa para namorar pode selecionar a programação que escurece o ambiente e põe um disco de Chet Baker no ponto.

Mas a grande novidade está mesmo na cozinha e é um fogão da Brustemp criado especialmente para o condomínio. Engraiado sobre uma placa de aço inox e vidro, ele tem quatro bocas, uma superfície para cortar, picar legumes ou bater carne e uma área para resfriamento de panelas. "O fogão só vai entrar em produção de larga escala se houver mercado", explica Mario Fiorotti, gerente da fabricante Multifrits, que não sabe sequer o preço do equipamento.

De acordo com Leonardo Senna, pelo menos uma das casas estará pronta até o final deste ano. Quem não tiver os R\$ 2 milhões de sobra poderá apreciar o luxo de fora. As maquetes do condomínio ficarão expostas a partir desta semana no shopping center Iguaçu, também na zona sul de São Paulo. Só para dar água na boca. ■

User-friendly designed lay-out considers a support surface for pre-food preparation.

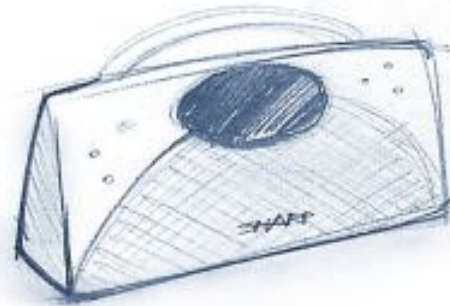
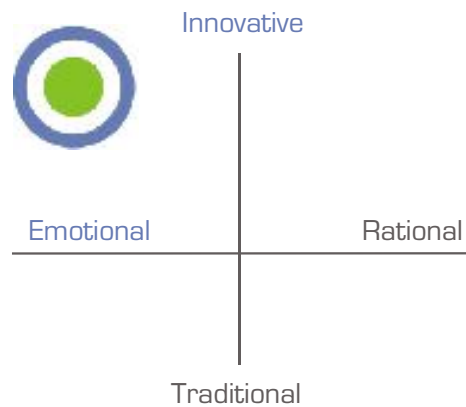


Portable Audio Device Concept

Industrial design reference for future developments - Sharp 1997

Sharp's new design strategy required the creation of concept products for each segment based on local brand positioning to serve as reference for future product development.

For the portable audio segment, after a wide market trends research, it was decided that the future products should have an emotional and innovative appeal.



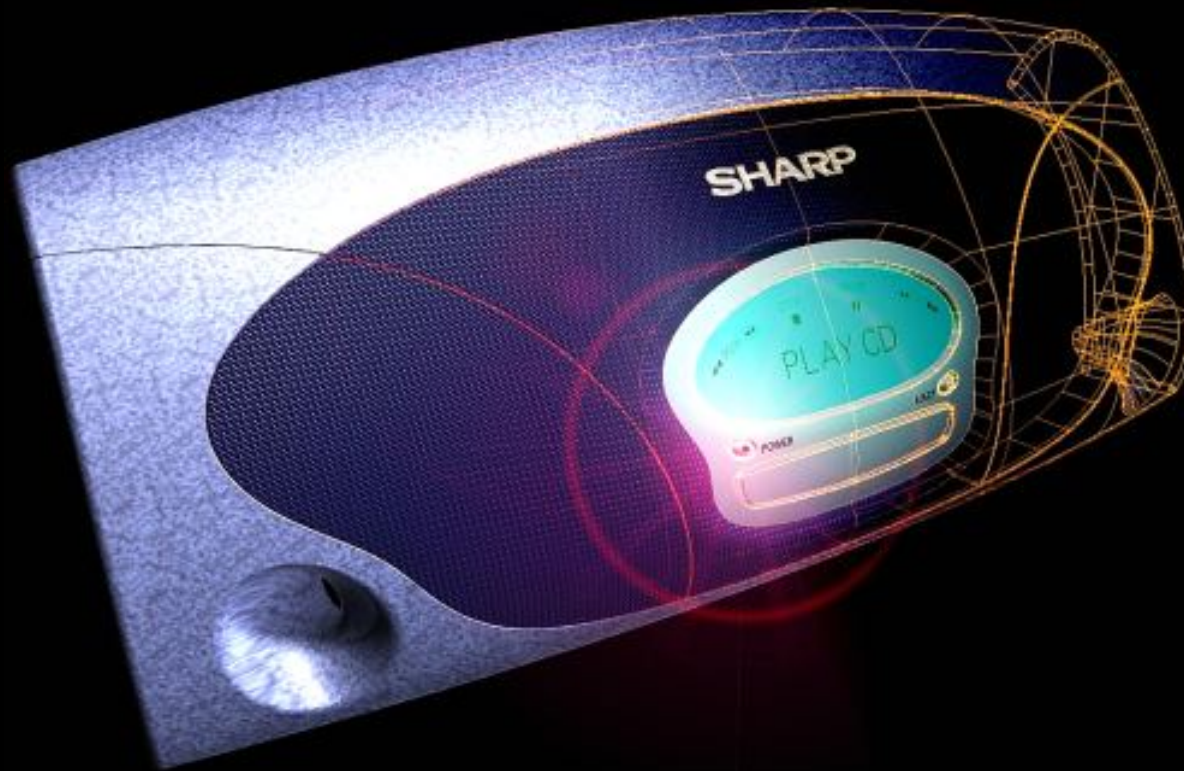
SHARP

Early sketches following selected industrial design guideline

Some possibilities were explored in order to find the best way to deliver the desired appeal.

Portable Audio Device Concept

Industrial design reference for future developments - Sharp 1997



Wireframe merging and lens flare effects made on Adobe Photoshop.

Selected version

This Alias Studio rendering shows the selected concept to be used as the reference for all portable audio devices yet to be designed.

Ergo Controller

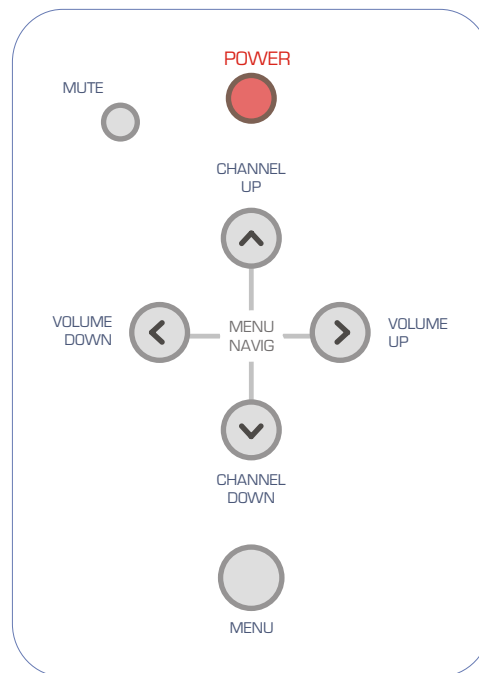
Ergonomic remote control - Sharp 1998

SHARP

All TV users complain about their remote controls. They are too big and it's just too much buttons and information to understand. This project had to deliver a simpler and more user-friendly remote control interface. Even blind people should feel comfortable with it.

Only 7 buttons to operate all functions

Quick access to power, volume and channel controls. All the other functions can be operated through On Screen Display by pressing "MENU".



Ergonomic shape development

The best fit for the hand and best button positioning could be achieved by using the own hand as a mold, pressing the synthetic clay as if it was the real remote.

Ergo Controller

Ergonomic remote control - Sharp 1998

Final version

As a result of deep engineering and suppliers analysis over the usability approved concept, this Alias Studio rendering shows the final look of the remote.

The use of colored plastic has been also suggested to make the device stand-out even more from competition.

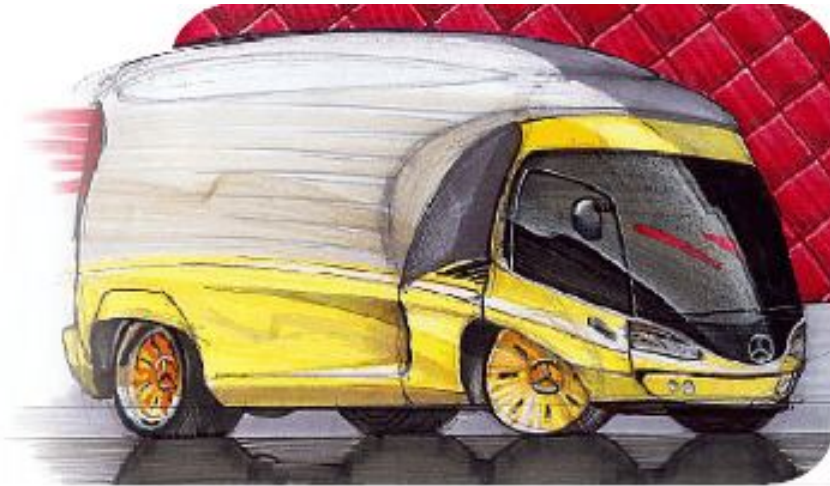


Wireframe merging effect
made on Adobe Photoshop.



Compact City Truck

Comercial vehicle for the tight spaces - Mercedes Benz 1996

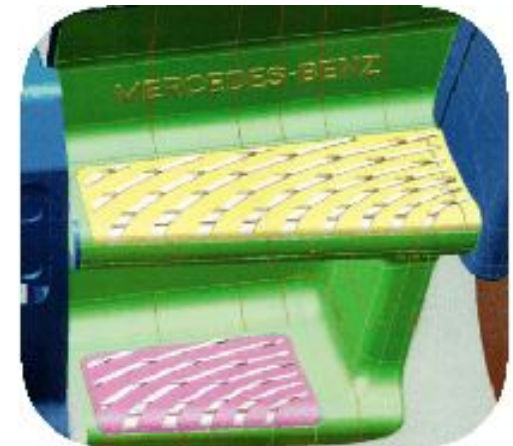


As part of the Mercedes Benz industrial design team, some solutions were chosen to take part of this new concept for a light truck such as the sliding door quite appropriate for urban use



Clay modeling

Also developing specific parts of truck's cabin, this seat height adjustment handle and the anti-slip surface for the cabin steps were approved and went into production.





Car Styling

Brand differentiation over same platform

Alfa Romeo 


HONDA

 SUBARU



Creation and 3D Modeling of Motorcycle

Entirely modeled on Pro-Engineering Software



Industrial design creation and complete 3D modeling. From the main frame until the minor details, such as the transmission chain links, everything was modeled from scratch.



Computer Graphics

Additional examples of 3D modeling and digital illustration

Software: Alias Studio + Adobe Photoshop
3D Modeling, rendering and addition of image effects.



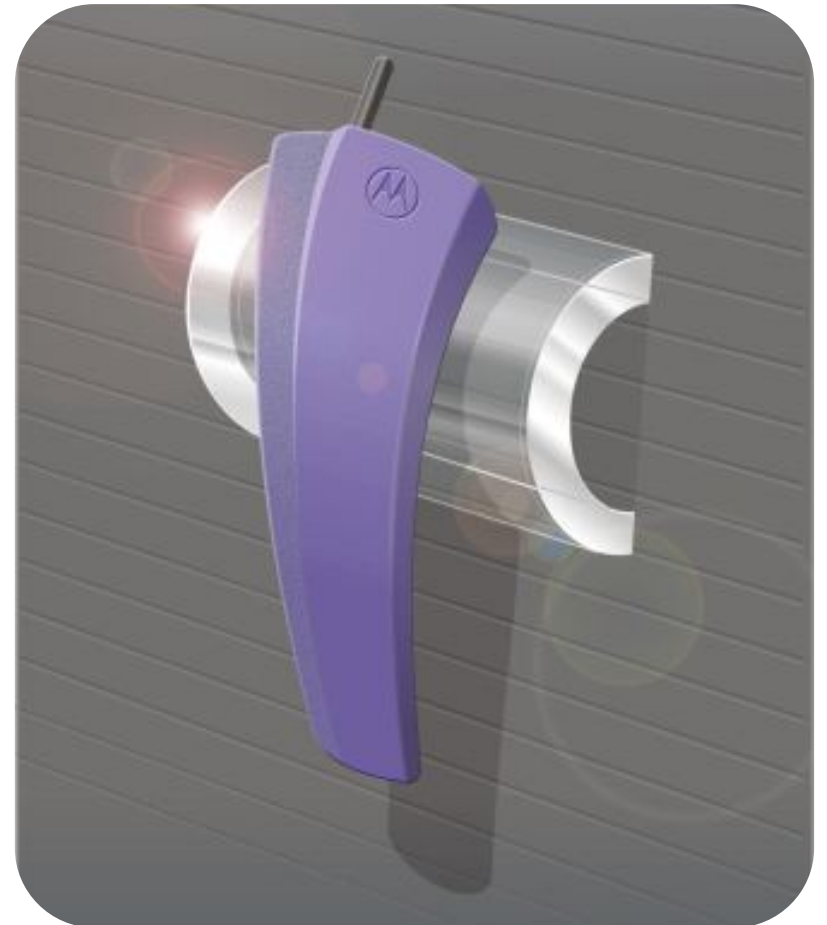
Software: Alias Studio + Adobe Photoshop
Wireless audio transmitter - 3D Modeling, rendering and addition of image effects.

Computer Graphics

Additional examples of 3D modeling and digital illustration



Software: Corel Draw + Adobe Photoshop
2D illustration entirely constructed on CorelDraw (every little detail)



Software: Corel Draw + Adobe Photoshop
Wireless telephone - 2D illustration constructed on CorelDraw.

Handicraft and Artwork

Creating - Designing - Building - Exploring alternative materials and techniques

Paintwork applied to refrigerator

Three layers of paint were applied to obtain the desired color effect. The graphics were defined with adhesive tape over the first layer (pearlescent beige with blue effect pearls). Then a second layer of silver was applied over the tape. Tape removed, a final layer of clear coat varnish sealed the previous layers. The door handle was made from a brushed aluminum profile.



Kanoa ceiling lamp

Wood sticks attached together with steel cable using an ordinary plastic pipe as ceiling support.

Handicraft and Artwork

Creating - Designing - Building - Exploring alternative materials and techniques

PDA Display - Sharp

Point of sales material built for product release.
Acrylic board with silk-screen printing.



Decorative object

Pieces of wood attached together and hand-painted.

Handicraft and Artwork

Creating - Designing - Building - Exploring alternative materials and techniques



Painting over
MDF board



PVC Lamp

Ordinary plastic pipe deformed and perforated to obtain desired lightning effect.



E.T. Plastic Lamp

Built with ordinary
dessert bows.