# Euromar

Development and application of modern technologies for the exploitation of ecological relations and cause-andeffect chains in the European seas. Nine years: \$157 million: Denmark, Finland. German, the Netherlands. Norway and Turkey, with interest from Greece, Italy, Ireland, Spain and Britain.

## Prospect for Construction Techniques

Development of an industrialized infrastructure system for urban construction techniques. Five years; \$8.8 million; France, Italy and Britain, with interest from Germany.

# European Software Factory

Design and creation of a data base with programing modules accessible to firms engaged in software development. Eight years; \$313.9 million; France, Germany, Norway, Spain and Sweden, with interest from Ireland.

## **Protein Design**

Development of a complete and integrated system of instrumentation and computer analysis capable of solving three-dimensional structures of small and medium-sized proteins. Five to 10 years; \$15.3 million; Denmark and Germany, with interest from Italy.

## Ceramics for Diesel Engines

Development of new, efficient, fibreneinforced ceramics for diesel enpines for commercial vehicles. Five years; \$13.4 million; France and Germany, with interest from Spain.

#### Mithra

Development, industrialization and use of mobile robots for telesurveillince. Four and one-half years; \$31.9 million; France and Italy, with interest from Switzerland.

#### Noses

Development of multimedia data has services with integration of the multimedia features in the entire Usin of equipment. Three years; \$72 million; Belgium, France and prtain.

#### Rabine

Avelopment of an advanced power Ineration system, compounding a Ineration system, compounding a Ineration system, compounding a Ineration system, seven years; \$45.12 Million; Belgium and France.

## Fishing Vessel for Year 1990

Development of technologies necessary for the conception, construction and exploitation of industrial fishing boats. Five years; \$53.7 million; France, Spain and Norway, with interest from Greece and Britain.

#### PACA-Absorbtion Heat Pump Project

Research, development and industrialization of absorption heat pumps (PACA type 1) and heat transformers (PACA type 2) for industrial use and high-power applications. Five years; \$9.6 million; France and Germany.

## Mass-Production from Animal Cell Cultures by a Continuous Process

Animal cell culture applications by implementing processes on an industrial scale, permitting either mass production of one specific chemical by a process during a long period, or versatile and adaptable production of small quantities of a large spectrum of products, such as monoclonal antibodies to be used in diagnostic activities. Three years: \$24.48 million; Austria, France and Italy, with interest expressed by Germany.

## Production of Precursor For High-Performance Ceramic Materials by Wet Chemistry

High-technology ceramics to have excellent mechanical properties under heavy stress, outstanding electrical and optical properties and exceptional resistance to high temperatures and corrosive environments. Three years; \$1.9 million; Austria and Belgium, with interest from Britain.

## Sub-0.1 Micron Ion Projection

Developments in telecommunications and data processing call for an increased integration of electronic components to be obtained by further reduction of the width to be mastered in mass production and by improvements in materials technology. Three to five years; \$4.8 million; Austria and Germany.

#### Prometheus

Create concepts and solutions that will point the way to a road traffic system with greater efficiency and economy and reduced impact on the environment, combined with a higher degree of safety. Eight years; \$14.88 million for first year; France, Germany, Sweden, Italy and Britain.

## Malaria Vaccine

Experimental research on development of malaria vaccine and serum. Four years; \$10.5 million; France and Germany.

## Universal Modular Color Display System for Process Control

Universal modular color display system for process control. Three years; \$960.000; Finland and Germany, with interest from Italy.

## Prolog Tools; Development of Software Tools in the Programing Language

Prolog aimed at expert systems. Three years for first phase; \$1.92 million; Belgium, Germany and Switzerland.

## HDTV

Development of a 50 Hz.-based HDTV system along an evolutionary development from the Mac-packet concept and compatibility with Mactransmitters and receivers. Four years; \$172.8 million; France, Germany, the Netherlands and Britain, with interest by Italy and Belgium.

## Eau Claire

Development of a systematic approach to further reducing water pollution levels, with the Rhine River basin as a model example. Four years; \$384,000; Belgium and the Netherlands, with interest by Britain.

## Fieldbus

Communications architecture based on a local area networks for real-time control of industrial processes and machines. Five years; \$24.5 million; Finland, France, Italy, Portugal and Britain, with interest from Germany.

## **BD11**

Development of a data base for distributed expert systems on low-level computers, using the Pick operating system and C language. Five years; \$19.2 million; France and Spain, with interest from Denmark.

## Hercule

Applications of robotics to the construction industry to eliminate laborious and dangerous physical tasks and improve productivity. Two products are envisaged—a load-manipulating crane (robot Atlas) and a platform-mounted robot (GEO) for working on tall buildings and large structures. Five years; \$21.1 million; France and Britain.

#### Polyvalent

Measuring system for hazardous gases. Four years; \$2.6 million; Belgium and Finland.

# Integrated Sensors for Large-Scale Applications

Integration of sensors in the production line using photolithography techniques and microelectronics. Five years; \$25.9 million; France and Switzerland.

## **Sunflower Seeds**

Production of new commercial varieties of sunflower with high oil content, suitable for arid zone conditions. Ten years; \$3.84 million; France and Spain, with interest from Turkey.

## Fast Prototyping Service for Silicon Applications Specific ICs (ASIC)

Development of compatible design and manufacturing tools for ASICs. Five years; \$28.2 million; France and Britain.

## Ada Realistic Software Workshop for Real-time Applications

Project aims to combine available components to provide Ada language programing environment for realtime application. Two years; \$4.1 million; France and Britain.

## **Transpolis Transpotel**

Physical distribution centers with provision for an integral data and communications processing system. Three years; \$38.4 million; the Netherlands, Switzerland and Britain, with interest from Austria and Germany.

## Europolis

Intelligent control system to aid urban and interurban traffic and advanced metropolitan information control and monitoring. Seven years; \$122.8 million; Denmark, France, Italy and Spain.

#### Carminat

System for the acquisition, transmission, processing and presentation of information to improve the safety of the driver and make trips easier and more efficient. Four years; \$49.9 million; France and the Netherlands.

## Oxidipene

Pharmacological and clinical development of oxidipene, a calcium antagonist, and studies of related structures. Eight years; \$5.76 million; France and Spain.