



Russia, Taganrog

**Summary**

1. **Volume of investments required – \$ 300 thousand.**
2. **Production**
  - Electronic cardiograph with an opportunity of wireless transfer of electrophysiological data in a pocket or personal computer.
  - Personal wireless system – an assistant to sportsman for monitoring physiological condition.
  - Wireless control systems of illumination and a microclimate in the house and office.
  - Wireless systems of definition and transfer of coordinates of the stolen car (by means of any cellular telephone).
3. **Trade marks – none.**

**Company profile**

**Date of establishment** – May 2006. The Firm was formed at the Technical University (the Institute of technology of Southern federal university). The team has an experience in creating applied projects in the field of microelectronics.

**Signs of public recognition** – Silver medal of the VI Moscow international interior of innovations and investments (2006) for presented innovative project on system engineering wireless data transmission; the Certificate of honor from The Foundation for assistance to small innovative enterprises.

**Number of employees** – 8 persons.

**Team**

**Kovalev Andrey** – Director, 31 y.o. Candidate of Technical science. Carries out general and strategic management of the company. Organizer of carrying out of researches and the development directed on creation of competitive production. Has experience of the successful organization and carrying out of collective scientific researches and applied development.

**Ryndin Evgenie** – Scientific Adviser, 39 y.o. Candidate of Technical science. Management of scientific and technical projects. Has wide experience of development of principles of construction, designs, models and software of modeling of transistor structures, libraries submicronic and nanosized elements of supergreater integrated schemes (SBIS), and also methods and software of their designing and modeling. Is the leading developer of element base, methods and software of its modeling.

**Lysenko Igor** – Manager on Marketing, 31 y.o. Management of marketing activity of the company. Experience of participating in advertising campaigns.

**Products characteristics**

**Service:** Development of devices and systems of wireless connection for monitoring and managements, digital complex functional blocks (IP-kernels) for programmed logic integrated schemes (PLIS), digital and digit-analog electronic devices of various purposes (assignment, destination), topology of printed-circuit-boards and microcircuits, ON for automated designing SBIS. Services are given in the form of the finished projects, results of scientific researches and-or consultation under concrete projects.

**Current production:** Complex functional blocks (IP-kernels) PLIS – processing of images in real time, cryptooperation data flows in any telecommunication systems on algorithm AES of 128 bats, reliable data transmission on a radio channel (for example, in satellite telecommunication systems) by means of channel coding on algorithm MAP.

**Products under development:**

**Electronic cardiograph** with an opportunity of wireless transfer of electrophysiological data in a pocket or personal computer. Focuses on medical and sports organizations for the remote control of organism's condition (besides pulse it is possible to supervise a body temperature and pressure).

**The wireless personal system** – the assistant to a sportsman for monitoring a physiological condition will allow to supervise independently the basic cardiologic parameters of the person for a correct choice of a mode of physical activities during trainings in fitness-clubs, sports sections and individually. Advantages of system are portability and low cost. Offered wireless control systems and signal systems in the house and office are intended for the "clever house".

**Wireless control systems of illumination and microclimate** in a house and office will include devices taking data from counters of water, gas, an electricity, heat, etc. also means of the signal system (fire, security, etc.). Application in the house of devices with interface ZigBee will allow: to facilitate installation and improvement of a house wireless network, to simplify installation of wireless sensor controls (gauges) for the control of functions of the "clever house", to operate set of household appliances by means of one control panel, to receive the automatic notice on unforeseen events in the house. All gauges of system are independent, that raises convenience, and reliability as the network of ZigBee-sensor controls will not be disconnected at once at cutting a cable in one place. Except for systems of safety separate management of devices, for example – inclusion of light and opening of a garage gate, or the global control

over all devices of the "clever house", from a coffee maker up to conditioners is possible also. Advantages of offered systems are simplicity of adjustment and operation, and also low cost.

*System of remote definition of coordinates of the car.* In Russia the nearest analogue of system of definition and transfer of coordinates of the car is service of firm "Caesar-satellite" which gives the equipment for the latent installation in the car and round-the-clock support of the dispatching center. However for reception of this service, except for cost of the equipment (approx. 5000 rubles), it is necessary to pay a user's payment.

Our development differs from analogue that there is no necessity for the dispatching center and, accordingly, at final users decrease expenses for its operation. This circumstance will allow expanding the market of similar systems in immediate prospects. The rights to the objects of intellectual property – the license contract on transfer of the rights to the patent and the certificate on registration of the program (concerning the wireless cardiograph and the sportsmen assistant).

## **Development strategy**

### **Use of funds**

1. R&D	25%
2. Acquisition of fixed assets (purchase of the special equipment)	4%
3. Products upgrade	3%
4. Marketing	10%
5. Acquisition of current assets	53%
6. Others	5%

### **Prospective outcome of investment**

As a result of investments in 2–3 years a \$ 2–2.5 million return is expected.

### **Marketing & Markets**

In the Russian market, alongside with the market of private houses and small business, there is an obvious opportunity of creation of systems with more expanded functions for corporate customers. It is expected that the market of wireless house devices in 2008 will reach \$ 900 mln. We assume to occupy 1% of the market in 3-4 years.

The market for the electronic device "fitness assistants" can be very wide (Russia and foreign countries). Roughly the volume of the given market to 2009 will reach not less than \$ 500 mln. Prospectively, our market share is also near 1%.

Systems of definition and transfer of coordinates of stolen car (by means of cellular telephone) will find demand among car owners and car service centers. Volume of the given market is not less than \$ 300 mln. Expected market share at the end of realization of the project – about 10%.

Promotion of the goods and services on the Russian market is planned to carry out through a network of the existing firms specializing in corresponding areas and realizing today similar systems of foreign and Russian manufacture. For today there are agreements on joint promotion of wireless cardiograph and the systems – assistants for sportsmen.

### **Interaction with investor**

Pay-back period is 2–3 years. Investor will have on exit after 3–4 years 50% share of the sales income equal to \$ 2500 ths.