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ENCOURAGING INNOVATION AND COMMERCIALIZING INVENTIONS IN AFRICA

Document prepared by Mr. Christopher Kiige, Examination Officer,
African Regional Intellectual Property Organization (ARIPO),
Harare, Zimbabwe

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I INTRODUCTION

In Africa, about 5% of the population have access to technical information, particularly technical information contained in patent documents and out of which, about 1% have access to correct information needed for innovation.

It is a well-known fact that innovation is inconceivable even in the future without accurate information. Supporting innovation by means of information and services of specialists particularly in industrial property, is the modern and relevant approach that should be taken by African countries.

Patent Information Centres, Information distribution Offices, Technology transfer offices, etc., offer a wide range of scientific and technical information necessary for innovation and commercialization of inventions. In Africa, these Information nodes cost a lot of money and the only hope is on the WIPO-net project.

II DISCLOSURE OF PATENT INFORMATION FOR RESEARCH AND INNOVATION

Patents and utility models have two essential functions. Firstly, a market monopoly for technical inventions is guaranteed for a limited period of time, in order to generate innovative activity. Secondly, the public is informed about the contents of the invention in order to encourage other companies to undertake further development.

The utilization of information available through this disclosure avoids wasteful duplication of effort and the multiplication of costs that research aimed at finding solutions to technical problems can entail; it acts as an inspiration or catalyst for further inventions and this contributes to the advance of science and technology.

Indigenous technology

Indigenous technology is technology, which involves using the natural sources of a region to solve the local needs. Solutions to problems are indigenous without external or foreign influences. Some of these solutions were indigenous but most of them particularly, have died away.

Some of the possible reasons are:

1. Inventions are local:

   People living in another area are unaware of inventive solution made by their neighbours.

2. Inventions are kept secret:

   A local craftsman inventing a new method is inclined to keep his invention for himself, for fear for being overtaken by others.

3. Inventions are not further developed:

An inventor has a new idea but the need was not there to improve it.

4. Tradition:

Inventions are rejected because they were against the traditional way of doing things and people are not always prepared to change their mode of life, certainly not when the ideas come form younger generation.

5. Lack of anxiety:

In normal circumstances the efficiency of the existing means is sufficient for the every day life, so there is no desire to improve it.

To overcome the above-mentioned reasons and to develop indigenous technology in Africa, the following points should be taken into consideration.

1. Limited environment:

Local inventions should be made known to other areas so that everybody could profit.

2. Secrecy:

Inventors should be protected or rewarded if they unveil their discovery.

3. Developing inventive ideas:

Inventors should be encouraged to improve their inventions.

4. Training**:**

The local people should be educated and shown the importance of these new methods (growth) or new technologies (change) for improving their living conditions.

III ENCOURAGING DEVELOPMENT OF TECHNOLOGY

It is important to note that the continued development and diffusion of new technologies around the world is not automatic.

Innovation has to be nurtured and encouraged and innovators must be appropriately rewarded for their new ideas.

Technological changes and, the health of our respective Nation’s economies depend to a large extent upon the structure of our intellectual property protection systems and how well they work.

IV HOW TO INVENT-ON-DEMAND

In inventing around other patents, there are two goals: a result that is patentable, so that the competition can be kept from copying it for the term of the patent; and avoidance of all the patents of others, so that the patented invention can be used without being stopped by other earlier patent holders.

There are basic rules to invention-on-demand, aimed at inventing around other patents, or aimed at developing a new patentable product that leapfrogs the market place.

Rule 1. Eliminate a part

The primary secret to inventing-on-demand is carefully to inspect other patents and the prior art in the field, and then to invent by eliminating the non-essential elements that were previously thought to be essential. This often requires realizing a new design concept, and changing some remaining parts. This approach provides both a legal and an engineering advantage.

On the engineering side, the elimination of a part usually results in a product that is cheaper to make, and is more reliable.

Rule 2. Do not add parts

A related rule for inventing on demand and designing around other patents deals with analyzing problems in early prototypes or products. The natural human tendency seems to be to address problems in a product by adding parts and functions. But it is often better to address problems in prototypes by eliminating or changing parts, not by adding parts. This often takes some minimum level of creative insight; although it is surprising how often a normal engineer can do this once he or she consciously recognizes the goal. It is relatively easy to solve a problem by adding new parts, but it requires a new concept to solve a problem by eliminating or merely changing part.

Rule 3. Exploit components with new low prices

Look for components that have recently become dramatically cheaper. Whenever this happens to an item, the item newly becomes a potential practical replacement for other items, or an addition to other items. This activity can constitute a patentable invention, and a good new product.

Rule 4. Make old equipment smart

Put something new and fancy e.g. a key pad on just about any device and you have a platform for the new smart version of the device. Then find out what the market would like the smart device to do, and change it accordingly. This can give you a new patentable product.

Rule 5. Use new materials

New applications of new materials in old devices can lead to superior performance, and patents. Using an old material in a new way can have similar results, but the opportunities may be less than for new materials.

Rule 6. Mind the aesthetics

One goal for a new product or service is a good look that adds nothing to a product's production cost, but dramatically increases its sales. A good look can be pure profit. And elements of non-functional ornamental appearance, if they are distinctive, can be protected by design patents and trademarks. Copyright may also be applicable in some cases, particularly for software and screen displays.

V ADVANTAGES OF A PATENT SYSTEM FOR AFRICAN OR DEVELOPING COUNTRIES AS A WHOLE

Patents enable African countries to incorporate into their development processes both the most advanced technology of industrialized countries and the technology most suitable for the needs of development process.

It is a means of encouraging African countries, so that in time, not only will they attain self-sufficiency in technology in certain fields, but they will also be able to compete in those fields on the international technology market.

As mentioned earlier on patents are a source from which valuable information can be obtained and put the use of African countries.

VI CONCLUSION

It must be recognized that without integrating the patent system in African countries' economic development program, patents will have very little value; and one of the surest means of achieving this integration is to design a system that encourages innovation and marketing of patented articles by producing within the country of articles in sufficient quantity.

It must be recognized that the overwhelming majority of patents granted in African countries are of foreign origin a fact, which should not be allowed to wholly uncompensated disadvantages on the economy of African countries.

Ways and means must be devised of ensuring that the monopoly rights granted to the foreign patentee do not result in exclusive benefit to the patent owner alone, but the African countries must derive some benefit from it as well. The most important benefit if the information contained in foreign patent documents which is vital for technology transfer.

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