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SCIENCE INDUSTRY ACTION AGENDA

Submission to
Advisory Council on Intellectual Property
IPAustralia
on
Patents and Experimental Use Options Paper

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Introduction

The Science Industry Action Agenda (SIAA) is pleased to present the following submission to the Advisory Council on Intellectual Property at IP Australia on the Patents & Experimental Use Options Paper.

The SIAA is a group of enterprises representative of Australia's science industry collaborating with two Commonwealth portfolios (the Department of Industry, Tourism and Resources and the Department of Education Science and Training) to develop a strategic plan for the industry. The action agenda process is aimed at identifying impediments to the science industry's growth and defining and implementing long-term strategies to overcome these impediments.

The science industry is defined as research and development, design, production, sale and distribution of laboratory-related goods, services and intellectual capital used for measurement, analysis and diagnosis. It comprises manufacturers of high value-added scientific and laboratory equipment and clinical diagnostics, analytical laboratories, importer/distributors and R&D organisations. The industry provides essential products and services to many other industries such as agri-food, resources, environmental monitoring, manufacturing, medical and health care, testing laboratories, research and development and education.

The industry enables better informed business and professional decisions that are essential to sustainable economic growth and a better quality of life that Australians have come to expect.

Australia's science industry is growing at more than 10 percent annually. Its R&D expenditure of 7.9% of sales is 10 times higher than the manufacturing industry's average. It has recognized strengths in providing the instruments and services necessary for the highly accurate measurement of minute quantities that may have very low concentration levels of substances present.

Australia's domestic market for science industry products and services is estimated to be \$6 billion in 2002/03, of which imports are \$2.8 billion and domestic sales are \$3.2 billion. Employment is approximately 47 000. In addition, scientific research was valued at around \$3 billion in 2002/03 with an estimated employment of 22 500. Exports of science industry products and services in the same period accounted for an estimated \$780 million. The industry's principal export markets are the developed economies of the US, EU and Japan. However, the emerging markets of China, South East Asia and South America present new opportunities for future growth.

The science industry is a high-growth knowledge-intensive global industry that relies heavily on innovation and the intellectual property from research to provide a continuous supply of high value-added world-competitive products, services and processes. One of the key priorities of the SIAA is for the industry to commercialise a much greater proportion of the intellectual property originating from Australia's publicly-funded scientific research organisations.

Comments on the options paper

Although there is broad agreement with regards to the contents of the options paper, there are three significant issues that have the potential to impact on the science industry and the researchers whose intellectual capital drives growth in this sector.

The first concerns the vulnerability of new start-up biotechnology and science industry companies (particularly in Australia where the number of small enterprises is increasing) to the actions of potentially predatory larger companies.

The second issue involves changes in the relationship between an inventor and the institution.

The third issue is that a patent should apply to the utility of any invention and not to the obvious nature of any naturally occurring plant/animal species or biological material contained therein (e.g., DNA or protein).

Issue 1: Vulnerability of new start-up biotechnology and science industry companies

The science industry, as do many other industries, relies heavily on innovation and the intellectual property from research for its competitive advantage in the market. Often start-up companies are created solely for the purpose of commercialising a piece of intellectual property that their principals have developed through research. These start-up companies are the engines for growth in the economy.

Mergers and acquisitions are a growth strategy used by larger companies and can have positive macroeconomic benefits. However, this growth strategy is a threat to the existence of start-ups. Under the circumstances of a hostile take-over of a start-up by a larger company to acquire its intellectual property, a balance needs to be struck between protecting the rights of the start-up and the rights of the larger company. On the one hand, this balance would enable the start-up to contest any acquisition bid by a larger company, while on the other hand, it would not hamper industry growth.

Issue 2: Relationship between inventor(s) and the institution and/or assignee

In regard to the second issue, there is a need to protect the rights of inventors once they have left the originating institution. We have encouraged the creation of a mobile workforce whilst at the same time assuming that institutions would attempt to protect the rights of their former employees. This has proven not to be the case. It is important to ensure that all inventors are afforded equal protection whether they remain in the employ of the originating institution or not.

Another aspect of the second issue is the use to which a publicly-funded research organisation makes of intellectual property. Much of the potential intellectual property developed in publicly-funded research institutions lies idle and is never commercialised. If inventors from these institutions identify a commercial opportunity that is not being taken up by the institution, and want to establish a start-up, they should not be hampered in their endeavours. The US deals with this situation with its

Bayh-Doyle Act which requires that any inventions from public grants must be made available on reasonable terms.

Issue 3: Utility of any invention and not to the obvious nature of any naturally occurring plant/animal species or biological material contained therein

In regard to the third issue of what specific inventions can be the subject of a patent, the options paper is particularly silent on this issue and should make some mention of it. It is considered that a patent should apply to an invention that is created through the use (or as defined often as “utility”) of the inventor’s intellectual capital and not simply the patenting on some naturally occurring object (be that a plant/animal species, or molecule that composes the former like DNA, protein or lipid) without reference to that “utility”.