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Innovation & Intellectual Property: Collaborative Dynamics in Africa

EDITORS:

JEREMY DE BEER, CHRIS ARMSTRONG, CHIDI OGUAMANAM AND TOBIAS SCHONWETTER

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Preface

This book is among the key outputs of the Open African Innovation Research and Training (Open A.I.R.) Project. Based on case study research in nine African countries, the book examines the recent history and current on-the-ground realities of innovation and intellectual property (IP) in African settings. In doing so, the book reveals complex collaborative dynamics across a range of different countries, sectors and socio-economic contexts, and generates recommendations for how innovation and IP can be married with social and economic development objectives in African settings. This book's sister report, *Knowledge and Innovation in Africa: Scenarios for the Future*, situates the current realities covered in this book within a much longer historical trajectory and multiple potential futures.

Conceived in 2009, established in 2010 and launched in 2011, Open A.I.R. is a pan-African and globally interconnected research and training network, which was established to:

- raise IP awareness in African settings and facilitate critical policy engagement;
- empower a networked, epistemic IP community in Africa;
- identify IP-related innovation bottlenecks and modes of open collaboration; and
- interrogate IP-related innovation metrics, capital and power structures

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…Chapter 12
Reflections on the Lack of Biofuel Innovation in Egypt

Bassem Awad and Perihan Abou Zeid

Abstract

This chapter outlines findings from research into Egypt's legal environment for biofuel patenting and the present state of biofuel innovation in the country. Based on evidence of only one domestically generated biofuel patent in Egypt at the time of the completion of the research in 2012, the chapter suggests policy and practical mechanisms which could help spark more innovation in this sector. The mechanisms suggested include online clean energy patent databases, a clean energy patent fast-tracking mechanism, and a green "patent commons".

1. Introduction

The energy sector in Egypt faces a number of challenges. The price of liquid petroleum has increased significantly in recent years, putting the country's oil reserves in decline and resulting in deterioration of the financial performance of the country's energy companies. An adequate and reliable supply of energy must thus be secured to support a growing population and to sustain economic growth. At the same time, as part of its commitments under the Kyoto Protocol and the UN Framework Convention on Climate Change (UNFCCC), Egypt must reduce greenhouse gas emissions and incorporate clean energy technology into its development plans.1

The government of Egypt has decided to diversify its energy supplies through the development of new and renewable energy sources. The country's national Renewable Energy Strategy was revised in 2007 (and the revisions made official in early 2008) to prioritise the use of natural resources in a more sustainable manner through the production of clean and renewable energy. Biofuels produced from rice straw, sugar cane, jatropha, jojoba or algae have been proposed as alternative fuel sources to solve some of the challenges facing the Egyptian energy sector.

Following the UNFCCC Bali meeting in 2007, the issue of the relationship between intellectual property (IP) mechanisms and clean energy technology innovation was brought to the fore. Laws and regulations governing patents have come to be viewed as possible barriers to the development of clean energy technology and its commercialisation. **In 2009, at the UN Climate Change Conference in Copenhagen, countries such as Brazil, China and India proposed to adopt measures on flexibilities and exceptions for IP rights to ensure greater access to clean technology. They argued that new "green" technologies should be subject to an expanded use of existing flexibilities in the implementation of IP rights, including the measure of "compulsory licensing". Such a licensing system has been used in the health area where, for example, a particular lifesaving drug is prohibitively expensive, and the Group of 77 developing nations (G77), led *de facto* by China, has argued for analogous application of this logic to patents for technology related to climate change mitigation and adaptation (Kogan, 2010)**.

While patents and other forms of orthodox IP are not in themselves accurate indicators for innovation in African countries – for reasons discussed in chapters 1 and 16 of this volume – our research study, as outlined in this chapter, sought to investigate the degree to which Egypt's patent system is conducive to biofuel innovation, and to see whether there are any legal and practical steps needed to enhance the country's innovation potential in this important area. The research consisted of a legal analysis of Egyptian patent law (provided in Section 2 below) and an examination of the current realities of, and stakeholder perceptions of, biofuel patenting (Sections 3 and 4).
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…**Bibliography**

… Secondary sources
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… IP Australia (2012), “Fast tracking patents for green technology”, available at: www.ipaustralia.gov.au/get-the-right-ip/patents/patent-application-process/
expedited-and-modified-examination-for-standard-patents/green-patents (accessed 11 April 2013).
Japan Bio-Energy Development Corporation (JBEDC) (2008), *Project Report: Egyptian Biofuel Industry Development*, available at: www.jbedc.com/en/projects-2.html (accessed 11 April 2013).
Kogan, L.A. (2010), *Climate Change: Technology Transfer or Compulsory License?*, Institute for Trade, Standards, and Sustainable Development (ITSSD), available at: http://itssd.org/LKogan%20-%20Climate%20Change%20-%20Technology%20Transfer%20or%20Compulsory%20License%20-%20ANSI%20Luncheon%201-15-10.doc (accessed 11 April 2013). <http://nebula.wsimg.com/89148f148afc3bad9267db8ee6172881?AccessKeyId=39A2DC689E4CA87C906D&disposition=0&alloworigin=1> (March 2014)
Korean Intellectual Property Office (2009), “Thanks to super speed examination, green technology acquires patent in a month”, available at: www.kipo.go.kr/kpo/user.tdf?seq=1305&c=1003&a=user.english.board.BoardApp&board_id=kiponews&catmenu=ek20200 (accessed 11 April 2013).
Maskus, K. E. and Okediji, R. L. (2010), *Intellectual Property Rights and International Technology Transfer to Address Climate Change: Risks, Opportunities and Policy Options*, International Centre for Trade and Sustainable Development (ICTSD) Intellectual Property and Sustainable Development Series Issue Paper No. 32, available at: http://ictsd.org/i/publications/97782/?view=document (accessed 11 April 2013).
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