A COMPARATIVE ANALYSIS OF INCOME TAXATION ISSUES OF INTELLECTUAL PROPERTY FROM THE PERSPECTIVE OF DEVELOPED AND DEVELOPING COUNTRIES

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ABSTRACT

Intellectual Property (IP) plays an important role in accelerating economic growth rates and consequently economic development, because of its effects on technology transfer and creation of other positive externalities. The role of IP in economic development is based on a number of factors involving taxation, specifically income taxation. The increasing volume of IP business transactions raises the issue of the capacity of income tax regimes in developed and developing countries to achieve two conflicting objectives: (i) protection of the tax base of IP transactions and (ii) encouragement of self development of IP. This paper makes a comparative analysis of the domestic income tax treatment of IP business transactions from the perspectives of developed (Australia) and developing countries (Egypt and India). The analysis of the income tax treatment of IP transactions in these countries reveals that similar approaches are often employed by countries with regard to the protection of tax revenue from IP business transactions. However, all countries need to provide specific tax treatment with respect to the disposition proceeds of the IP transactions. On the other hand, different approaches are employed to encourage self development of IP which reflects the overall difference in tax policy. In this respect, Australia has an approach to encourage self development of IP which is similar to the majority of developed countries. However, it needs further improvement in terms of providing specific tax privileges to direct investments in R&D activities and exploitation of IP. The Indian income tax legislation is similar to the Australian for encouraging self developed IP. It is considered to be better than the Egyptian tax legislation and better than that in many developing countries. Accordingly, tax legislation, particularly in developing countries, can play a significant role in stimulating self developed IP which leads to higher levels of economic growth and development.

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I INTRODUCTION

Intellectual Property (hereafter, IP) is an important component of many business
transactions, in particular for specific industries such as information technology,
biotechnology, communications, and pharmaceuticals. Moreover, the importance of IP
in business transactions has increased significantly in recent years, as a result of the
implementation of the TRIPS agreement.1 This was a significant outcome of the GATT
agreement, which led to the establishment of the World Trade Organisation (WTO).

Developing countries represent the majority of the WTO member countries and they are
required to fulfill the membership obligations related to IP protection. Consequently, the
bulk of developing countries carried out many reforms of IP legislation and institutions.
This had a significant impact on IP protection and consequently encouraged domestic
and international companies to be extensively involved in IP business transactions and
development.2

This development in IP protection addresses a number of tax issues. Those issues relate
to the capability of the tax legislation to achieve two objectives: (1) protecting the tax
base and (2) encouraging the development of in-house IP. Therefore the question
arises: ‘How should developed and developing countries tax IP transactions properly?’

The answer to this question requires the following approach:

(i) Reviewing the literature and practices of the tax treatment of IP;
(ii) Identifying the tax treatment of IP transactions under the Australian, Egyptian
and Indian Income Tax Legislation, as examples of developed and developing
countries; and
(iii) Assessing the tax treatment of IP in these tax jurisdictions in accordance with
adequacy and efficiency criteria.3

The adequacy criterion is an indicator of the capability of tax legislation in protecting
the tax base which exhibits a country revenue need.4 In this context, taxation of
intellectual property rights (hereafter, IPR) raises the capability of tax legislation in
tracing IP business transactions. In doing so, an analysis of the tax provisions relating

1 Trade related aspects of intellectual property rights, known as the TRIPS agreement, is an integrated
part of the GATT agreement, which led to the establishment of the World Trade Organisation (WTO) in
1995. This agreement set benchmark measures for protecting IP worldwide. Those measures have to be
addressed within the domestic legislation of respective member countries of WTO. For more details see,
WTO, ‘Agreement on Trade-Related Aspects of Intellectual Property Rights’, available online at
<http://www.wto.org/english/tratop_e/trips_e/t_agm0_e.htm> (at 2 July 2009).
2 For more detail see for example, Bernard M. Hoekman et al, ‘Transfer of Technology to Developing
568.
4 Ibid.
to various types of IP business transactions is carried out in accordance with income tax legislation in some developed and developing countries.

On the other hand, economic efficiency criterion is concerned with correcting market failure associated with specific business activities. The specific nature of IP, particularly that part that relates to the self development activities of IP, requires specific tax treatment. Therefore, the tax treatment of the transactions and activities related to stimulating self developed IP will be analysed. The analysis focuses on Australia as an example of developed countries, and Egypt and India as examples of developing countries. The choice of these countries is also supported by the study of Sanjaya Lall who developed an indicator for technological activity. In accordance with this indicator, countries around the world were classified into four groups of technological activities which are:

i. Intensive technological activity group which includes developed countries which will benefit from strong IPR protection measures.

ii. Moderate technological activity group which includes some developed and developing countries which will benefit from strong IPR protection measures and bear some costs.

iii. Low technological activity group which includes major developing countries. Those countries are expected to bear significant costs from strong IPR protection measures while in the long run they will get potential benefits.

iv. Negligible technological activity group. This last group includes less developed countries which bear significant costs from strong IPR protection measures forever without potential benefits.

Australia was ranked in the first group whereas Egypt and India were ranked in the third group in respect of which there are current costs and potential benefits. This addresses the role of the tax system to deal with maximising benefits with regard to Australia while minimizing current costs and increasing potential benefits in a case of Egypt and India.

Accordingly, this paper proceeds as follows. The second section reviews literature related to taxation of IP transactions. Sections Three to Five analyse and assess the tax treatment of IP licensing, IP transfer, and self-developed IP under Australian, Egyptian and Indian income tax legislation. Section Six analyses and assesses the impact of specific tax treatment for specific entities on taxation of IP, in these tax jurisdictions. Section Seven assesses the overall impact of tax policy on the tax treatment of IP under Australian, Egyptian and Indian income tax legislation. Section Eight is a summary conclusion.

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6 The reasons for choosing these countries are related to economic and technical factors. For the economic factors Australia is a developed country which was ranked number 2 according to the human development index, while Egypt and India were ranked as 123 and 134 respectively as medium human development. In addition both Egypt and India are considered leading countries in their regions. On the other hand, the technical issue is related to the author’s interests in examining the tax systems in these countries.
8 Ibid 1664.
9 Ibid 1666.
II LITERATURE REVIEW

A An Overview of IP Business Transactions

Assessing the tax treatment of IP in terms of the desired objectives requires at the outset a determination of the various types of IP business transactions, and the involved parties. Those transactions take a number of forms, which reflect business preferences. However, the most common forms are licensing and transfer in addition to self-developed activities of IP. Therefore, those forms are the most common forms for technology transfer and development, because the holder of IPR is more concerned to license or transfer it to a new user for a number of reasons such as market strategy and profit maximisation. Those forms address a number of legal and tax issues. Following is a brief description about each form, which will enable us to understand the tax consequences arising from carrying out each one.

Licensing of IP subject matter is similar to licensing any other business asset. This process has two parties, a licensor and a licensee. The licensor of the IP subject matter is the owner/holder. It has the right to license for use of the IP subject matter to someone else in return for specific consideration. On the other hand, a licensee of IP has the right to use the IP subject matter in its business operations in return for a royalty paid to a licensor. Figure 2.1 illustrates the licensing of IP subject matter.

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10 In addition to the abovementioned IP transactions, Rider et al added two more types which are (i) the use of IP in carrying out R&D activities in behalf of a third party, and (ii) the use of IP in collaborative research projects with other scientific institutions. For more details, see Cameron Rider et al, 'Taxation Problems in the Commercialisation of Intellectual Property' (Intellectual Property Institute of Australia, the University of Melbourne, IPRIA Report 1/06, 2006), 15. It is available online at <http://www.ausicom.com/_dbase_upl/tax_IP.pdf> accessed at 2 May 2008.


12 There is a difference between a royalty payment and a licensing fee. A royalty payment is an amount paid under specific conditions such as number of units produced, sales volume, etc, which implies that a royalty is a variable amount. On the other hand, a licensing fee is a fixed amount paid by a licensor to a licensee regardless of any other variables. For more details see Debapriya Sen 'Fee Versus Royalty Reconsidered' (2005) 53 (1) Games and Economic Behavior 141, 141-142.
Figure 2.1 illustrates the elements of licensing transactions.

The above figure has two parts. The upper part shows the contracting transaction, while the lower part shows the financial outcome, which creates two tax issues:

(i) Taxing the royalty income in the hands of the licensor; and
(ii) The deductibility of the royalty paid by the licensee.  

Another type of IP business transaction is IP transfer. It is different from the licensing in terms of the exclusivity of rights. An IP transfer gives the transferee an exclusive right to use, exchange, or sub-license the IP to one or more third parties. Therefore, a transfer is similar to the sale of a capital asset. The owner/holder of the IP receives specific consideration in return for completing a transfer of the IP subject matter. The tax treatment of the consideration for the transfer of the IP is similar to the tax treatment of the consideration for the sale of other capital assets. The concern will usually be the capital gains or losses that arise from the transfer. Figure 2.2 illustrates the transfer process.

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13 Income Tax Law No 91 of 2005
Figure 2.2 illustrates the IP Transfer Transaction and Related Tax Issues

The third type of IP business transaction is self-developed IP. Self development of IP is common practice in many industries, especially pharmaceutical and information technology, as a result of extensive spending on R&D activities. This type of expenditure is an important means for creating in-house IP such as know-how, patents, and secret formulas. The R&D expenses consist of recurrent expenses and capital expenses. Recurrent expenses mainly consist of salaries and materials used in experiments. Capital expenses consist of depreciation of capital assets, such as scientific apparatus, laboratories, buildings and fixtures.

B Taxation of Licensing IP

The licensing contract defines and enables the exclusivity of rights, the term of the contract, the royalty payment, the territory of the contract, transferability, and sublicensing. The tax treatment of licensing is often determined based on the exclusivity. Therefore, identifying the distinction between different types of IP licensing transactions in terms of exclusivity is important. In this context, there are three types of licensing:

i. Exclusive license. Here the licensor gives exclusive rights to the licensee of the IP. Accordingly, the licensor cannot use the IP asset any longer, because the monopoly power has been transferred to the licensee. This transfer of the IP is

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16 The degree of exclusivity provided by a licensing contract determines whether the licensing proceeds are treated as ordinary income or capital gains. In this respect, see the Australian High Court case, FCT v McNeil [2007] HCA 5, (2007) 233 ALR 1; (2007) 81 ALJR 638 (22 February 2007).

17 Paul McGinness, above n 15, 231.
the same as the disposition of IP, or sale of tangible property, where the seller cannot use it after the sale.

ii. Non-exclusive licensing. This implies that the licensor licenses the IP subject matter to a number of licensees. In addition, the licensor can continue to use the IP.

iii. Sole licensing. This implies that the licensor licenses the IP to one licensee only.

The involved parties in these transactions are subject to different tax treatment which depends on (i) the position of each party, whether he is a holder or user of IP, and (ii) the nature of the transferred rights. The following section discusses the tax treatment of each type of transaction in detail.

1 Taxation of Licensing Proceeds

To protect the tax base in so far as it consists of income from IP business transactions, it is necessary to identify and define that income generated from them. Accordingly, determining the tax treatment of licensing transactions requires an accurate definition of the licensing proceeds/ consideration, which is usually called a royalty. A royalty can be defined as the amount paid by the licensee to the licensor in return for using the IP subject matter. There may be slight or considerable differences among definitions used by countries. However it is useful to refer to the standard definition of ‘royalty’ as defined by the OECD, which defines ‘royalty’ as:

Payments of any kind received as a consideration for the use of, or the right to use, any copyright of literary, artistic or scientific work including cinematograph films, any patent, trade mark, design or model, plan, secret formula or process, or for information concerning industrial, commercial or scientific experience.

This definition sheds light on the specific elements of a royalty.

i. A royalty is related to the use of rights. Those rights are driven by holding any type of IP;

ii. the registration of IP with a register is not a prerequisite for licensing the IP and obtaining a royalty;

iii. Royalty income is not limited to licensing contract payments only. It extends to cover the compensation paid for the infringement of rights, or other fraudulent uses; and

iv. Income arising from rendering a service or the leasing of real property is not a royalty.

The tax treatment of royalty receipts within one tax jurisdiction, in the hands of a licensor, seems to be straightforward. It should be included in assessable income along with revenues derived from other sources. However, the form and timing of the royalty payments may complicate the tax treatment.

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18 The royalty concept is widely used in the area of licensing/exploitation of mineral resources, and sometimes in leasing contracts (rather than rent). For an explanation of the royalty concept see Lee Burns and Richard Krever, 'Taxation of Income from Business and Investment', in Victor Thuronyi (ed), Tax Law Drafting and Design (IMF 1998) 597, 615- 617.

Royalty payments take two forms; a lump sum payment or revenue stream. Both are often taxable under ordinary income tax rules.\(^{20}\) In the UK, the lump sum payment is taxed in six taxable periods, which means 1/6\(^{th}\) of the payment is taxed every taxable period.\(^{21}\) However, the former is certain and the latter is contingent. The contingency is related to the various bases that are used to calculate the amount of the royalty payment. Those take a number of forms, such as the number of units produced in the case of licensing process/know-how, the number of units sold in the case of licensing patents, and sales volume in the case of licensing trademarks.\(^{22}\)

Timing is an important element with respect to recognition of licensing income. Accounting principles tend to be more conservative in this respect, in particular with regard to contingent income. However, the conservatism principle is not acceptable in determining assessable income arising from licensing transactions.\(^{23}\) Identifying the time of the income flow is an essential basis for income recognition in accounting and taxation.\(^{24}\) The accrual basis is the basis for recognising income of corporations in accordance with generally accepted accounting principles (GAAP).\(^{25}\) Accordingly, the royalty income is often recognised as taxable income when it is accrued in the hands of the recipient regardless of payment time.

Royalty payments from a resident licensee to a resident licensor are either exempted from withholding tax, which is imposed on non-resident licensors, or subject to an assessment on a withholding tax basis.\(^{26}\) For example, the UK Income Tax Act 2007 (hereafter UK ITA 2007) levies a withholding tax under two circumstances. The first case is when a royalty is paid on a regular basis. Withholding tax is levied in accordance with s 901. On the other hand, when a royalty is paid on an irregular basis (e.g. lump sum), withholding tax is levied in accordance with s 903. Moreover, section 903 levies a withholding tax at the basic rate on royalty payments related to patents or other intangible assets.\(^{27}\) The withholding tax on domestic transactions of IP is often intended to track those transactions in order to protect tax revenue.

\(^{22}\) For more details with regard to the basis of calculating royalty see, Paul McGinness, above n 15 358-360.
\(^{23}\) For more details with regard to the income recognition issue, see Lee Burns and Richard Krever, above n 18, 632-634.
\(^{24}\) Taxation income realisation/recognition rules sometimes deviate from accounting rules, because of different measurement objectives for each one. Taxation is concerned with measuring income that is based on a periodical basis and the ‘ability to pay’ principle, while accounting is concerned with measuring, income that is based on going concern and conservatism principles.
\(^{26}\) In Portugal royalty payments among resident taxpayers are subject to withholding tax. A payer has to withhold 15% from the payee as a tax payment in advance, and the payee has to claim this percentage from his final tax liability. For more details see Rui Camacho Palma, ‘Portugal: Income Taxation of Intellectual Property and Know-How: Conundrums in the interpretation of domestic and treaty law’ (2004) 44(11) *Journal of European Taxation* 482.
2 Taxation of Licensing Payments

The deductibility of the IP licensing fees is another issue in the licensing transaction from the viewpoint of a payer/licensee. Licensing fees are often treated as a recurrent expenditure rather than capital expenditure. This treatment is in line with the matching principle, which is a cornerstone of accounting for revenues and expenses.28 Further, the tax rules are often intended to be in line with that principle through setting a nexus between the claimed expense and the assessable income. On the other hand, deductible expenses raise the timing issue, that is, when is the expense tax deductible?29 Burns and Krever addressed two arguments to answer this question. Those are (i) the legal-economic liability and (ii) the cash economic liability.30

The legal-economic argument is explained through implementation of the accruals basis. The expense is due when it has been incurred which represents the legal aspect. The economic aspect of the accruals basis implies that goods or services were provided/rendered. Applying this analysis to the licensing of IP subject matter implies that a licensee should claim a deduction for a royalty payment when the two aspects (legal and economic) of the accruals basis have been fulfilled. Conclusion of a licensing contract satisfies the legal aspect. However this is insufficient for deducting a royalty payment from assessable income. It must be accompanied by the economic aspect. Using the rights of the IP in the production or sales process satisfies the economic aspect. The royalty, therefore, accrues regardless of payment and it should be considered as a current tax-deductible expense.

The second argument is the cash-economic liability argument. You can deduct an expense when it has been paid for. However, this alone is insufficient without receiving the goods or rendered service. Therefore the licensee cannot claim the payment related to the IP licensing contract, unless the relevant IP (e.g. patents, know-how or trademark) rights have been received. The common approach is to use the legal-economic rule rather than the cash-economic rule. The former is consistent with accounting standards. In this regard, tax legislation tends to minimise the deviation between accounting and tax rules. The above discussion of both rules is relevant for all business transactions as well as IP transactions.31 Nevertheless, additional criteria that reflect the specific nature of IP, in particular a limited useful life of many IP assets, are needed. This condition ensures that

28 Ibid 21-22.
29 For example, subsections 8-1(1) and (2) of the Australian Income Tax Assessment Act 1997 (hereafter ITAA 1997) set specific criteria for deductibility of business expenses (more details will be explained in the Australian section of this paper).
Also, section 162, of Internal Revenue Code of the US identifies the general rule for the deductibility of current expenses. Maine & Nguyen noted that:
It is allowed to the taxpayer to deduct ordinary and necessary expenses paid or incurred during the taxable year in carrying on any trade or business. This deduction is available under the following conditions; (i) it is a current expense rather than capital expense, (ii) it is incurred in the ordinary course of business and (iii) it is necessary for deriving taxable income.
Jeffrey A. Maine and Xuan-Thao Nguyen, above n 2020, 103.
31 In this part, the discussion is more general rather than focusing on a specific tax jurisdiction. This general discussion gives a broad scope for tax policy makers to design the relevant tax provisions which serve their objective of taxing IP.
the licensing contract is within the term of the IP subject matter, for example, a licensing contract that is limited to the protection of a patent or trademark. If the licensing contract exceeds the patent term, the related royalty payment should be denied. The expiration of a patent term gives the right to the licensee to use the patent without the permission of the patent holder. Accordingly, the licensee could not claim a royalty payment for an expired patent. This condition is necessary especially when the licensee and licensor are related persons.

3 Taxation of Compulsory Licensing

Compulsory licensing of IP is a new mechanism which was introduced by the TRIPS agreement. This mechanism aims to solve specific issues related to using a patent without the permission of its owner/holder. Article 31b of the TRIPS agreement identifies when compulsory licensing is allowed, and what is the commitment of the licensee.

A licensee is obliged to pay a reasonable remuneration to a licensor. The licensing rights are non-exclusive and the consideration for compulsory licensing and other related issues are subject to judicial review. The tax treatment of remuneration, therefore, is similar to the licensing revenue stream. In this respect, the remuneration for compulsory licensing represents a revenue stream to the licensor. This revenue should be included in the assessable income of the licensor. On the other hand, when a licensee is a taxable person, it is qualified to deduct licensing fees (royalty payments) from its taxable income in a similar way to normal licensing, as previously discussed.

4 Taxation of Infringement Awards and Compensation

Disputes often arise relating to patent infringements or the passing off of a trademark. The patent holder/trademark owner bears the bulk of negative impacts of the infringement. They have to protect their rights by legal proceedings against the infringer or via an out-of-court settlement. If the holder wins the case or reaches a settlement with the infringer, the infringer may have to pay a specific amount (award) to the holder. There is a strong debate about taxation of infringement proceeds. For example, Cutler set a number of criteria for considering litigation proceeds as income. For example, the proceeds must be in lieu of income foregone, that is, an award not related to personal damage, etc. But the infringement award also poses a capital gains tax issue. In accordance with Cutler view, when the compensation is related to an income loss, it is treated as income and subject to ordinary income tax rules. Compensation payments for

32 Compulsory licensing is often used in the pharmaceutical industry. It was mainly introduced to deal with public health difficulties that many developing countries face. However, many developed countries use it. There are many examples of compulsory licensing in developed countries. For more details, see Mohamed Salem Abou El-Farag, ‘TRIPs, TRIPs-plus, Developing Countries and Public Health: the Case of Egypt’ (2008) 5(1) Journal of International Biotechnology Law 1, 9.

33 For more details, see Article 31 of the TRIPS agreement.

34 Anne Fairpo, above n 27, 32.


capital gains/losses are subject to the capital gains tax regime. In order to determine the taxable capital gain or loss arising from a compensation payment, a cost base must be identified, as will be discussed in the following section.

In the US, infringement awards relating to a patent are considered ordinary income since income of the patent holder has been negatively affected by the infringement, which had affected the holder’s tax base in previous periods. So the award for patent compensation is added to taxable/assessable income and treated as a revenue stream. On the other hand, compensation for a trademark infringement is considered a capital receipt because the goodwill of the trademark holder has been negatively affected. Therefore, the cost base of the trademark (goodwill) is deducted from the compensation payment to determine the amount of the capital gain or loss.

C Taxation of IP Transfer

The transfer of an IP asset from the owner/holder to someone else may occur in either of two ways. The first is a commercial transfer in which a transferee is obliged to pay a specific consideration to the transferor in return for transferring the rights pertaining to the IP. The second is a donation, in which the transferee obtains the IP owner’s rights to use IP without any compensation under specific conditions. The tax treatment for each type of transfer is different. The focus here is only on the first type of transfer, which significantly affects the taxable income of the transferor.

1 Taxation of a Transfer Proceeds/Consideration

The transfer/sale of IP poses the issue of how to tax the sale proceeds or consideration. The consideration for the IP subject matter sale/transfer takes two forms. It can be a lump sum or via instalment payments. Thus, the consideration is not a revenue stream, because it does not meet the ordinary income criteria: (i) inflow, (ii) periodicity, and (iii) separation from the source. In this context, in the UK, when a patent is disposed of in exchange for instalment payments, it is treated as capital income and the capital gains attributed to each instalment paid on a 1/6th basis.

A transfer of IP is similar to the disposition of other tangible and intangible assets. The outcome of a transfer of IP or a disposition of capital assets usually results in a capital gains tax event. A capital gain or loss is usually the difference between the consideration proceeds and the cost base of the disposed asset. This implies that a consideration amount will be above or below the cost base. May defined capital gains as ‘the profit upon realization of assets otherwise than in the ordinary course of business, this profit being the excess of the proceeds of realization over the cost of property realized’. This definition gives three conditions for identifying capital gains tax events:

37 Charles R. Cutler, above n 35, 475.
38 See Jeffery A. Maine and Xuan-Thao N. Nguyen, above n 20, 509-516.
39 Ibid 515.
40 Kevin Holmes has developed the income pyramid. It consists of legal, economic and accounting concepts of income, with criteria attached to each concept. See Kevin Holmes, *The Concept of Income a Multi-disciplinary Analysis*, (IBFD, 1st ed, 2000), 164-166.
41 See Anne Fairpo, above n 27, 86-87.
42 See Anne Fairpo, above n 27, 101-103.
i. Capital gains are recognised on a realisation basis rather than an accrual basis;  
ii. The pertinent business transaction does not occur in the ordinary course of business;  
and  
iii. The consideration received exceeds the cost base.

The first condition is important for recognising that the transfer of an asset from the seller to the buyer has taken place. This is a necessary condition for a capital gain. If the market value of an asset has increased, but the asset owner still possesses it, there is no capital gain.\(^44\) The realisation criterion is applicable for tangible as well as intangible assets (i.e. IP). In the case of an IP transfer, realisation of a capital gain or loss implies that the transferor has transferred the IP rights and related risks to the transferee.\(^45\)

The second condition is related to the nature of capital gains and business transactions. Those business transactions occasionally occur. When the sale of a capital asset occurs in the ordinary course of business, the realised gain is treated as ordinary income. The specific nature of IP means the transfer of IP often occurs as an isolated event. Therefore, the realized gain is a capital gain.\(^46\)

The third condition for a capital gain is that the consideration amount exceeds the cost base of the sold/ transferred asset. If this is not the case, the seller realises a loss. This condition addresses the issue of identifying the cost base of the sold or transferred asset. The cost base is the historical cost of acquisition of an asset.\(^47\) This original cost typically consists of the purchase price, registration fees, instalment expenses, and any other capitalised expenses. Moreover, with IP, the distinction between in-house developed and purchased IP is an important matter. In the case of in-house developed IP, development expenditures are often expensed on a recurrent basis.\(^48\) However, other registration fees and other expenses are capitalised. Those capitalised expenses represent the cost base of the transferred IP. This approach to calculating the cost base is applicable to tangible and other intangible assets as well as IP. An important issue in this respect is that the cost base must be adjusted to reflect any deducted depreciation or amortisation in accordance with tax legislation provisions.\(^49\)

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\(^44\) Kenneth L. Smith, 'Capital Gains and Losses in Accounting' (1939) 14(2) *The Accounting Review* 126, 126.

\(^45\) Regardless of consensus among legislators that capital gains tax is based on the realisation principle, there is strong debate in academia about the advantages and disadvantages of the realisation principle against the advantages and disadvantages of the accrual principle. For more details, see Alan J. Auerbach 'On the Design and Reform of Capital Gains Tax' (1992) 82(2) *The American Economic Review* 263.

\(^46\) In many cases, there may exist an independent firm which is involved in commercialisation of IP subject matter, such as the case of spin-off companies or other similar forms. In this regard the transfer of IP from that company to someone else is considered an ordinary business transaction, and the income which arises is considered ordinary income. For more details see, Cameron Rider et al, above n 10, 5-13.

\(^47\) There is strong debate with regard to the basis of calculating the cost base, whether it should be based on historical costs, replacement costs, indexed costs or other measures. However, Burns and Krever have identified that the cost base should include the acquisition costs plus any ancillary costs arise from acquisitions, such as legal fees and stamp duty. For more detail see Lee Burns and Richard Krever, above n 18, 649.

\(^48\) More details for in-house developed IP are in the following section.

\(^49\) See Anne Fairpo, above n 27, 128-129.
2 Taxation of Acquisition of IP

IP subject matter is acquired by either purchase or self-development (creation). Purchase takes place through a transfer of IP, while self development takes place through carrying out R&D activities and spending on advertising, which leads to the development of IP. Development costs are often expensed as recurrent expenses.50

The transfer of IP subject matter is similar to the acquisition of a tangible asset. The transferee has exclusive rights to use the rights accompanying the transferred IP item. The transferee pays specific consideration to the transferor and incurs other incidental expenses related to the acquisition. The total amount is known as the acquisition cost. The benefits of acquisition flow within a specific number of years. This implies that there is a future benefit of acquisition. If so, acquisition costs should be amortised over a specific time.51 That will depend on the time frame during which the future benefits are expected to occur. The amortisation expense is tax deductible according to the benchmark income taxation principles.52 However, the tax treatment of amortisation differs from one tax jurisdiction to another. Deductibility of amortisation of IP acquisition costs is a function of a number of elements. These elements are the type of IP, the acquisition cost base, and the amortisation method.

With regard to the type of IP subject matter, some tax legislation allows amortisation for some types of IP (i.e. patents) and denies it for others. This will be discussed in the case of Australia (i.e. trademarks). A similar case exists to some extent in the UK. In this respect, the UK ITA 2007 provides a capital allowance for a number of forms of IP subject matters. These include a patent, a trademark and know-how.

Patents and trademarks are considered to be depreciable assets, if they are used in the business or for investment in accordance with s 466(2) of the Capital Allowance Act 2001 (UK) (hereafter the UK CAA 2001). In order to work out the amortisation amount, acquisition costs which are known as available qualifying expenditure must be determined.53 The difference between the qualifying expenditure and disposal receipts of the patent is added to the patent pool when it is positive. The patent pool qualifies for a 25 percent capital allowance. By contrast, under the UK CAA 2001, know-how does not qualify for a capital allowance when it is related to the goodwill.54 Nevertheless the know-how can be treated similarly to a patent when the holder elects to not treat it as goodwill.55

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50 More detail about self developed IP will be explained in the next section
53 There are two types of available qualifying expenditures: the first type is qualifying non-trade expenditure which belongs to the investment patent. On the other hand, the second type is qualifying trade expenditure which belongs to the trade patent. See Anne Fairpo, above n 27, 109.
55 Anne Fairpo, above n 27, 122-123.
With regard to the depreciation method, the UK implements an asset pooling system, through what is known as the patent pool or know-how pool, as explained previously. On the other hand, sections 167 and 197 of the US Internal Revenue Act allow using two methods of amortisation for specific items of IP. These methods are the straight line method and the income forecasting method. There are a number of prerequisite elements for each amortisation method, namely (i) cost base, (ii) asset expected useful life, and (iii) depreciation rates.

With regard to the depreciation rate, various approaches have been used to determine depreciation rates. When the tax legislation allows a higher rate (above the normal rates) to depreciate assets, it is known as accelerated depreciation. The objective of using accelerated depreciation is to encourage taxpayers to replace their old assets and acquire new technology. Also in many situations tax administrators issue rules to identify depreciation tax rates.

3 In-House Developed IP

The tax treatment of self-developed IP is mainly concerned with the treatment of expenses incurred in the development process. Therefore, it is important to analyse the process of developing a new IP item in order to track various expenses items. The development process of any IP item has a number of phases which ultimately lead to its creation. For instance, the development of a new patented product or process in the pharmaceutical industry passes through a number of phases. The first phase involves conducting pharmacological research. The second phase involves running pre-clinical research. The third phase is a clinical phase. The fourth phase is marketing. The ultimate outcome of this process is a patented product or process. This development process creates a number of tax issues for Research and Development (R&D) expenditures, marketing expenses and registration fees. On the other hand, developing other items of IP such as brand names, trademarks and undisclosed information (secret formula) involves incurring salaries, marketing expenses and registration fees. Accordingly the tax treatment of developing a new item of IP will require classification of the three types of expenditures, namely R&D expenditures, marketing expenditures and registration fees.

Many scholars and policy makers have paid more attention to the tax treatment of R&D as a result of its positive externalities. Accordingly, many countries have designed specific tax treatments for R&D to stimulate new inventions and innovations and hence create domestic IP subject matters. This represents the other side of taxing IP subject

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56. Jeffrey A. Maine and Xuan-Thao Nguyen, above n 20, 157-174.

57. The research in the pharmaceutical industry is complicated and costly. In order to proceed from one phase to another, the approval of the competent authority is required. For instance in the US, pharmaceutical firms are required to get the approval of the Food and Drug Authority (FDA), for carrying out the pre-clinical, clinical and marketing phases of any new drug. For more details, see Nina J. Crimm, ‘A Tax Proposal To Promote Pharmaceutical Research, to Encourage Conventional Prescription Drug Innovation and Improvement and To Reduce Product Liability Claims’ (1994) 29 Wake Forest Law Review 1007, 1017-1019.

matters which is the macroeconomic aspect. The situation has encouraged scholars to investigate the tax treatment of R&D from different perspectives, such as how to design a type of specific treatment and assessing its efficiency.\textsuperscript{59}

Marketing expenses are broader than advertising expenses. They include advertising expenses, salaries and wages of sales staff, and other promotional activities. This type of expense is often expensed recurrently as a part of ordinary expenses, as it is considered necessary for carrying on the business.\textsuperscript{60} However, a strong debate exists with regard to advertising, especially when it relates to start-up expenses or an advertising campaign. In this regard the question arises whether there is a need to capitalise it or expend it as a revenue expense.\textsuperscript{61} Tax legislation and court cases set specific criteria for capitalising any expenditure, such as that the term of future benefits must exceed the taxable period. Capitalisation of these expenses represents the development costs of trademark which often require considering it for amortisation purposes as previously discussed.

The tax treatment of registration fees of any asset is to treat them as capital expenditure, since they are considered a cost of protecting the capital asset.\textsuperscript{62} For instance, in Australia the cost base of any capital asset has first element and second element costs.\textsuperscript{63} First element costs include the acquisition cost, second element includes incidental costs, registration fees and other miscellaneous expenses which are necessary to prepare the asset for work. Therefore, registration fees and other legal fees related to protecting an IP item must be capitalised and amortised over a specific time.\textsuperscript{64}

Based on the abovementioned discussion, the tax treatment of expenses that lead to the development of new IP subject matter are either expensed on the recurrent basis or capitalised and depreciated over a number of years. The former treatment is often granted to R&D expenses associated with creating patents, while the latter is more related to trademarks. Therefore, when self-developed IP items are transferred to someone else, the issue of cost base is posed as was discussed before. The tax treatment of advertising and other expenses except R&D is often straightforward and similar to other expenditure items whether related to intangible or tangible assets.\textsuperscript{65}


\textsuperscript{60} Capitalization of expenses is a problematic matter which sometimes forces taxpayers to seek a solution through the courts. This situation makes tax authorities concerned to solve the issue out of the courts through issuing relevant regulations which determine the required criteria for capitalizing expenditure. In this context, The Internal Revenue Service (IRS) has issued proposed capitalization regulations on 19 December 2002. For more details see Robert Feinschreiber and Margret Kent, ‘Understanding the Capitalization Regulation’ (2003) 4(5) Corporate Business Taxation Monthly 3.

\textsuperscript{61} For more details with regard to the tax treatment of expenses of self-developed IP, see Jeffery A. Maine and Xuan-Thao N. Nguyen, above n 20, 99- 130.

\textsuperscript{62} Harrison and Mucek have argued that costs incurred in protecting income is considered as current expenditure while costs incurred in protecting the asset itself, such as registration fees of trademarks, is considered as capital expenditures and must be capitalized. For more details see, Jack F. Harrison and Bradley J Mucek, ‘Trademark Taxation: What’s in a Name?’ (1988) 41(Fall) The Tax Executive,41.

\textsuperscript{63} For more details, see section 40-190 of the ITAA 1997.

\textsuperscript{64} Ibid.

It is obvious that the taxation of IP transactions is subject to asymmetrical and debatable tax provisions. Moreover the literature here often focuses on the tax treatment within a single tax jurisdiction. However, carrying out a cross country analysis is more helpful. It shows the different approach for dealing with IP transactions and it helps to conclude some common features of the appropriate tax treatment of IP. For that purpose the coming section will review and analyse the tax treatment of IP in Australia as an example of developed countries and Egypt and India as examples of developing countries.

**III Analysis of the Tax Treatment of Licensing Transactions under the Australian, Egyptian and Indian Income Tax Legislation**

This analysis of the tax treatment of IP transactions covers legal provisions, precedents and rulings that are related to the taxation of IP transactions. Those transactions are licensing, transfer, self-developed IP and IP transactions of specific legal entities, as explained previously. The focus here is on the domestic IP transactions which are carried out among domestic partners. They are companies which are resident of the relevant tax jurisdiction, or a foreign corporation which has a permanent establishment. The outcome of IP transactions will only influence the corporate income tax liability under the assumption that the corporate body is a recipient or payer of royalty income and transfer consideration.

The analysis is carried out in accordance with the Australian ITAA 1936 and ITAA 1997, the Egyptian ITL 2005, and the Indian ITA 1961. The analysis here aims: (i) to compare the tax treatment of IP transactions in these countries as examples to developed and developing countries and (ii) to assess their tax treatment of IP in terms of protection of tax revenue and encouraging self-developed IP in accordance with the previous section.

**A The Tax Treatment of IP Licensing Proceeds**

The discussion of the tax treatment of IP licensing in developed and developing countries aims to assess the capability of the income tax legislation thereof to define and

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66 The marginal tax rate for a corporation under ITAA 1936 and ITAA 1997 is 30 percent. This is multiplied by taxable income which is the difference between assessable income and allowable deductions. The Australian income tax legislation grants a number of deductions and exemptions which makes the average effective tax rate lower than the marginal rate. In this context Mintz calculated the average effective tax rate for Australia which was around 27 percent in 2007. For more details see Jack Mintz, ‘2007 Tax Competitiveness Report: A Call for Comprehensive Tax Reform’ (2007) 254 Journal C.D. Howe Institute Commentary 1.

67 The marginal tax rate for corporations is 20 percent, under ITA 2005. Nevertheless, the Central Bank of Egypt and Suez Canal Authority are subject to a 40 percent tax rate. Moreover, petroleum extracting and exploitation companies are subject to a 40.55 percent tax rate. It is claimed that the ITL 2005 is more neutral and there are not many tax deductions and allowances from taxable income. However, the average effective tax rate calculated by Mintz was around 11 percent: Jack M. Mintz, ibid.

68 The marginal tax rate for corporation under the Indian ITA 1961 is 30 percent. This is multiplied by assessable income which is the difference between taxable income and allowable deduction. The Indian income tax legislation grants a number of deductions and exemptions which makes the average effective tax rate lower than the marginal rate. In this context Mintz calculated the average effective tax rate for India at around 28 percent in 2007. For more details see Jack Mintz, ibid.
determine the income that arises from licensing properly. Accordingly, a review of the relevant tax provisions within the Australian, the Egyptian and the Indian income tax legislation is provided below.

Income which arises from a licensing transaction is royalty income in accordance with the royalty definition provided by s 6(1) of ITAA 1936 and s 995 of ITAA 1997. The definition covers various types of royalty payment whether it is periodical or a lump sum payment. In addition it covers various types of IP business transactions whether licensing or transfer of various types of IP subject matters. Accordingly, licensing income in the hands of the licensor is considered ordinary income in accordance with s 6(1) of ITAA 1997. This income is also considered an assessable income when it arises from compulsory licensing since the definition of royalty mentioned in relation to licensing in general covers any type of licensing of property rights for use by a licensee.

This income should be included within a taxpayer's assessable income as an ordinary income of property. It may also be a part of statutory income in accordance with s 15-20, when it is not within the domain of s 6(1). This shows that the royalty income is included within assessable income either as ordinary income or statutory income, when that income falls within the meaning of royalty.

The timing for income recognition is an important factor for taxing royalty income in the hands of recipient. Section 6(1) of ITAA 1997 stipulates taxing income when it is derived. The derived income may be either accrued or received income. Accrued income arises where the accrual basis is the determinant of taxable income: any prepayment or post payment are not considered for taxing income. Therefore, when the licensed rights of IP are being used by a licensor this determines the accrued income. On the other hand, received income arises where the cash basis is implemented, which means the royalty income is taxable when it is received. The court cases often tend to implement the accrual basis in commercial transactions which is consistent with financial accounting practices. Accordingly, the royalty received from a resident is taxable as on the accrual basis when it is a part of commercial transaction. The Egyptian ITL 2005 considers a royalty as a source of income in the hands of the recipient. In this respect, Art. 3] provides that any income that arises from licensing,

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69 According to s 6(1) a royalty/ royalties include(s) “any amount paid or credited, however described or computed, and whether the payment or credit is periodical or not, to the extent to which it is paid or credited, as the case may be, as consideration for -
(a) the use of, or the right to use, any copyright, patent, design or model, plan, secret formula or process, trade-mark, or other like property or right;
(b) the use of, or the right to use, any industrial, commercial or scientific equipment;
(c) the supply of scientific, technical, industrial or commercial knowledge or information;
(d) the supply of any assistance that is ancillary and subsidiary to, and is furnished as a means of enabling the application or enjoyment of, any such property or right as is mentioned in paragraph (a), any such equipment as is mentioned in paragraph (b) or any such knowledge or information as is mentioned in paragraph (c); (da) the reception of, or the right to receive, visual images or sounds, or both, transmitted to the ...”

71 Ibid.
lease, or royalty payments from a resident licensee to a resident licensor is taxable income in the hands of the licensor. Moreover, Art. 1 (Para 12) defines a royalty as:

Any consideration paid in return for the use of copyrights related to literary, artistic or scientific work, including cinema movies and the use of any patent, trademark, design layout, model plan, secret formula or the right to use scientific, commercial or industrial equipment or information related to scientific, commercial or industrial expertise.

The word as it is used here is more comprehensive than just licensing or transfers of rights which are often carried out in accordance with contracting terms. It encompasses using IP subject matter under a contract and without a contract. At the same time, the royalty definition covers a royalty payment whether it is related to the licensing or transfer of IP or any other intangible property.

The above definition includes various sources of royalty sourced in Egypt, when it is within the meaning of royalty. Accordingly, a licensor is obliged to include a royalty received or accrued in taxable income. Taxable income of a juridical person (e.g. corporations), includes business income which arises from various business transactions including capital gains. Consequently, the licensing of IP (e.g. patents) is considered a type of business transaction which yields taxable business income. Moreover the licensing proceeds of compulsory licensing and infringement awards are taxable under that definition of royalty income.

With regard to the timing issue of royalty income, since the royalty income is derived from business transactions that are carried out by a legal entity, this income is taxable on an accrual basis. The Egyptian ITA 2005 clearly stated that the accounting profit, which is prepared in accordance with the Egyptian accounting standard, is the basis for working out taxable income. Accordingly royalty income received by a resident is taxable when it is accrued.

The tax treatment of royalty income under ITA 2005 has been improved compared with its tax treatment under the previous Income Tax Law No 157 of 1981 (hereafter, ITL 1981). Under Art 111B (Third) of ITL 1981, royalty income from know-how, the disposition of any rights and similar transactions was subjected to withholding tax at 32 percent without any deduction and it was excluded from a company's tax base. Also, when a company releases losses from its businesses, its royalty income is taxable regardless of tax losses. An important matter in a comparison between the abolished and the current income tax legislation is that the current income tax defines the royalty concept clearly. It also identifies various sources of royalty income which covers various types of IP subject matters. Clarity of definitions is important in reducing tax disputes, and simplifying compliance issues.

73 There are no legal precedents related to royalty income in Egypt under the ITL 2005, because it was only recently introduced and implemented. Moreover, using legal precedent within the Egyptian tax system is not common except for the cases of Supreme Court. In this respect there are no famous court cases related to royalty income. This is shown in Seadek's discussion of royalty income. He relied on common law court cases to support his argument about the meaning of royalty income and its implementation. For more detail see in Arabic, Ramadan Seadek, Interpretation and Implementation of the Conventions of Double Tax Treaties (Helwan University Press, 2007) 443-469.
The Indian ITA 1961 defines royalty income as a consideration paid whether as a revenue stream or as a lump sum, (a lump sum payment being chargeable under capital gains),\(^{74}\) in return for licensing or granting rights related to using the IP.\(^{75}\) Royalty payments accrue under a number of business transactions. Those transactions are laid down in s 9, and are; (i) transfer, (ii) imparting and (iii) use of IP, technical services and scientific knowledge. Those three types of transactions refer to various types of use of IP whether under a contract or not. So the objective of elaboration is to encompass various techniques to use IP. Moreover, it is obvious that royalty income arises from a number of sources, as well as licensing IP. A royalty received from licensing IP subject matter is taxable income. It must be included in the taxpayer's tax base.

Compulsory licensing and infringement awards are not included in the exempt income sources which are listed in s 10 of ITA 1961. In this regard, there is no specific treatment of those types of licensing income and consequently they are taxable as an ordinary royalty.

The income recognition role for business income according to s 145(2) of ITA 1961, is based on accounting standards which itself use the accrual basis for measuring business income. Accordingly the royalty income derived from licensing IP to a resident taxpayer is taxable when it is accrued.

The above analysis reveals that both developed (Australia) and developing countries (Egypt and India) have suitable legal provisions to tax the proceeds of licensing IP business transactions. The tax treatment of the licensor of IP subject matter is similar in the three countries in terms of income recognition rules and inclusion within taxable income. Further similarity exists in the tax treatment of the proceeds of compulsory licensing and infringement awards. However, there are a number of significant differences. These are:

1. The Australian ITAA 1997 and the Egyptian ITA 2005 taxes the royalty income of both individuals and legal entities on an equal footing, while the Indian ITA 1961 gives tax incentives only to individual licensors in two cases: (i) royalty income from compulsory licensing is fully exempt in accordance with s 80RRB(c), and (ii) up to INR 300000 of royalty income is tax deductible from an individual tax base, in accordance with section 80RRB(c). This Indian treatment aims to encourage self developed IP by individuals.

2. A royalty payment is subject to withholding tax or deduction at source in accordance with s 194J of ITA 1961. A licensee or a payer (a juridical person which is subject to Indian ITA) of a royalty is required to withhold 10 percent of the gross amount which is paid to a resident licensor,\(^{76}\) under the condition that the royalty amount is above INR 20,000. The withholding tax approach supports taxation of IP and enables the tax authority to track IP business transactions which improve the measures of protecting tax revenue.


\(^{76}\) Different rates are applicable with regard to a non-resident licensor. Those rates are laid down within the provisions of double tax treaties between India and other countries.
**B The Tax Treatment of Licensing Payments**

Protection of tax revenue requires also considering the right of the royalty payer (licensee) to deduct the royalty payment from taxable income. This is consistent with benchmark taxation rules as previously discussed. A royalty payment is considered a necessary expense in order to carry on the business operation, because the IP subject matter (e.g. patent) is an input for business operations.

In order to enable a licensee to claim a deduction for a royalty payment, the Australian *ITAA 1997* sets in place specific measures for the deductibility of business expenses. In this respect, section 8-1(1) identifies the general criteria for deductibility of business expenses. Section 8-1(1) states that:

> You can deduct from your assessable income any loss or outgoing to the extent that; (i) it is incurred in gaining or producing assessable income or (ii) it is necessarily incurred in carrying on a business for the purpose of gaining or producing your assessable income.

Business enterprises often use IP subject matter as an input in their business operations. For example a pharmaceutical company uses a patented process to produce a new medicine or drug, which is sold to generate an assessable income. Moreover, the production process could not be performed without the patented process. Accordingly, a royalty paid for licensing a patent is tax deductible according to the positive limbs criteria.

On the other hand, section 8-1(2) identifies when expenses are not tax deductible. It states that:

> You cannot deduct a loss or outgoing under this section to the extent that: (i) it is a loss or outgoing of capital, or of a capital nature or (ii) it is a loss or outgoing of a private or domestic nature or (iii) it is incurred in a relation to gaining or producing your ‘exempt income’ or your ‘non assessable non-exempt income, or (iv) a provision of the Act prevents you from deducting it.

In order to ensure correct deductibility of a royalty payment, it must not fall into any of the negative limbs. In this respect, the royalty paid by a pharmaceutical company, in this example, is a type of recurrent expenditure. It is related to the business, it is incurred for producing taxable/assessable income. It meets the criteria for deductibility under s 8-1(1).

*Art. 22* of the Egyptian *ITA 2005* provides general rules for tax deductible expenses.

They are:

i. The expenses shall be related to the business activity and it is necessary to run the business.

ii. It must be a true expense and supported by relevant documents.

Accordingly, this type of royalty payment is generally a tax deductible expense which is deductible from a taxpayer’s tax base.
The same tax treatment of a royalty payment is also given within the provisions of the Indian ITA 1961. In this regard, ITA 1961 provides the rules for deductible expenses. Those rules are applicable to various types of expenses as well as to a royalty payment. Sections 30 to 36 enumerate specific expenses, which may be deducted from taxable income. Because the existence of an exhaustive list of deductible expenses is impractical, s 37 gives general rules for deductible expenses.77

The above discussion shows that in the three tax jurisdictions the tax treatment of a royalty payment is similar. However, the issues of treating a royalty payment as either a revenue expense or a capital expense may arise in the case of exclusive licensing which is similar to transfer which will be discussed in the following section. In this respect, the judicial precedents may be used as guide to the licensee, especially in the case of Australia and India as common law countries.78 For example, the Indian Supreme Court in CIT v. IAEC (Pumps) Ltd stated that ‘The amount paid by the taxpayer to a foreign company for granting a license to use its patents exclusively in India for a period of ten years with the intention of renewing it further would be revenue in nature’.79 This case shows that even though the royalty payment was a lump sum and the patent was exclusively licensed, which would normally have made the case equivalent to a transfer, the possibility of renewal of the contract led the court to treat the case as a licensing transaction rather than a transfer, and consequently the royalty payment was considered a recurrent expense.

When the expense is tax deductible, it is subject to the similar rule of income recognition for tax purpose as previously discussed. The discussion showed that the three countries often tend to use the accrual basis for recognising royalty income as taxable income, accordingly the same principle is applied to the deductibility of a royalty payment when it is accrued.

IV Analysis of the Tax Treatment of Transfer Transactions under the Australian, Egyptian and Indian Income Tax Legislation

A The Tax Treatment of Transferors

Tax legislation often distinguishes between a taxpayer who carries out commercial or industrial business activities and other taxpayers. In addition, tax legislation usually distinguishes between depreciable capital assets such as tangible assets (plant and equipment) and non depreciable assets such as shares which do not play a structural role in the business operations of a taxpayer. In this respect, two approaches are often employed by a tax legislator to deal with capital gains: either to tax them separately or to treat them as ordinary income. Those approaches are based on the purpose of holding the capital asset. It must be determined whether it is used in a profit oriented

77 For more details with regard to deductible expenses under s 37, see CCH, above n 75, 144–148.
79 Ibid 50.
business or for personal use. In the latter case, it is often treated separately, while in the previous case it is often treated as a part of assessable income.80

A separate tax treatment for capital gains often involves granting a concession to the eligible taxpayer in order to deal with some economic issues such as inflation.81 This treatment is designed particularly for investment assets, such as investment in rental property or on the stock market. On the other hand, depreciable assets, which are used in business activities, are often excluded from capital gains tax.82

A capital gain that arises from the disposal of a depreciable asset is normally treated as ordinary income via the balancing adjustment provisions. Therefore, capital gains that arise from the transfer of IP subject matter that are used in business are included as ordinary income. On the other hand, IP subject matters are excluded from CGT. The consideration amount paid for disposition or transfer of IP is considered royalty income which is statutory income according to s 15-20, ITAA 1997.83

The addition of capital gains to statutory income might be subject to specific conditions or deferment of tax treatment, such as a 50 percent reduction of capital gain in assessable income or rolling over of the gain, if the consideration obtained has been invested in another similar asset. Nevertheless, when an Australian company transfers IP for specific consideration (royalty), the capital gains derived is added to assessable income as a statutory income without any deduction.84

Various approaches are used to deal with capital gains. However two important elements must be identified clearly. Those are the consideration and the cost base. Consideration for a transfer/sale of IP subject matter is the amount paid by the transferee in return for outright use of IP. Consideration must be determined in accordance with arm’s length terms.85 This is an important condition, particularly when the transfer occurs among associated parties. In this case, there is a doubt about the value of consideration where it might deviate from arm’s length price.

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80 For example in Ireland, capital gains realized by a company may be treated either according to capital gains provisions or according to corporate income tax. The previous treatment is applicable only to capital gains driven from disposal of land, while the latter treatment is applicable to the capital gains that are driven from the disposal of various assets. For more details see Irish Revenue Authority, ‘Guide To Capital Gains Tax’ (2004). It is available online at <http://www.revenue.ie/leaflets/cgt1.pdf>
81 May argues the proper tax treatment for capital gains must deal properly with the causes of capital gains which may be one of the following:
   i. changes in absolute value due to natural growth or similar causes,
   ii. changes in the relative value of property in comparison with other property, due to external causes, and
   iii. changes in the money value of the property due to depreciation or appreciation of currency. See George O. May, ‘Taxation of Capital Gains’ (1922) 5(34) Journal of Accountancy321, 331
82 CGT of depreciable assets which are subject to balancing adjustment events of businesses are subject to CGT separately, according to section 104-235 of ITAA 1997.
83 Frank Gilders et al, above n 70, 219-225.
84 Ibid 772.
85 Lee Burns and Richard Krever, above n 18, 651.
With regard to the cost base, tax legislation gives general principles, which are applicable to various types of capital assets whether they are intangible or tangible assets. For example working out the cost base of IP, e.g. patent, will be as follows: (i) the royalty paid for a transferor is considered the first cost element, (ii) consultation and legal fees and other related expenses are the second cost base element, (iii) when a transferee borrows for financing a royalty payment, the interest incurred is considered the third cost element, (iv) when a transferee carries out further R&D activities in order to develop the transferred patent, the R&D expenditure is considered the fourth cost base element, (v) the registration fees paid for transferring the IP in order to protect the rights of the transferee is considered the fifth cost base element. The total amount of these costs represents the cost base of the CGT event which should be deducted from the received consideration when it is transferred to a third party.

There is no separate tax treatment for capital gains under the Egyptian ITL 2005. It considers capital gains arising from depreciable assets as part of ordinary taxable income, in accordance with Art 17 and 51. When IP subject matter is being used in business operations, it is considered a depreciable asset. Consequently, any capital gains that arise from the transfer of any IP subject matter is treated as ordinary income and included in the income tax base. This treatment is totally different than the previous treatment under the repealed ITL 1981 which taxes transfer consideration whether as a lump sum or a stream of revenues as income from mobile capital, as previously explained.

The Indian ITA 1961 has a specific tax treatment of capital gains, which complicates the matter, especially when it deals with non-depreciable assets or transactions arising outside the ordinary course of business. However, tax legislation tends to simplify the rules with regard to depreciable assets which are used in business operations. Accordingly capital gains arising from depreciable assets are included in the assessable income of a company.

Assessing the tax treatment of transfer proceeds of IP is important to assess the capability of tax provisions in protecting the tax base. In this respect, in the three countries, they consider that IP subject matter as a depreciable asset and consequently the realised capital gains from outright disposal of IP is treated as ordinary income. This treatment protects tax revenues; nevertheless, it may discourage a transfer of self-developed IP to a third party or spin-off company. With regard to the former, the full amount of consideration is taxed as a capital gain, while in the latter it is taxed as

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86 Section 110-25 of ITAA 1997 identifies five elements of cost base:

i. The first element is the total of (a) the amount you paid or are required to pay, in respect of acquiring it, and (b) the market value of any other property you gave, or are required to give in respect of acquiring it.

ii. The second element is incidental costs you incurred.

iii. The third element is the costs of owning the CGT asset you incurred, such as interest on money you borrowed to acquire the asset; and costs of maintaining, repairing or insuring it; rates or land tax, if the asset is land.

iv. The fourth element is capital expenditure you incurred; (a) the purpose or the expected effect of which is to increase or preserve the asset’s value; or (b) that relates to installing or moving the asset, and

v. The fifth element is capital expenditure that you incurred to establish, preserve or defend your title to the asset, or a right over the asset.
unrealised gains. Accordingly, specific consideration is required to balance between protection of tax revenue and encouragement of self-developed IP.

B The Tax Treatment of Transfer Payments

The transferee acquires a new capital asset in return for incurring significant costs, which are known as acquisition costs. In this regard, the tax treatment of capital costs is a significant matter. Amortisation of acquisition costs of transferred IP over a specific period is consistent with the accounting matching principle, as previously explained.

Amortisation of acquisition costs of IP is provided for under specific conditions in Australia. In this respect, s 40-30 (1) of ITAA 1997 identifies depreciable assets. A depreciable asset is defined as ‘an asset that has a limited effective life and can reasonably be expected to decline in value over the time it is used, except: (1) land, (2) an item of trading stock, and (3) an intangible asset, unless it is mentioned in subsection s 40-30(2)’. In this respect, depreciable intangible assets are identified as; (i) mining, quarrying or prospecting rights; (ii) mining, quarrying or prospecting information; (iii) items of intellectual property; (iv) in-house software; etc. Accordingly, this section states that items of IP are depreciable assets. Those items are defined in section 995-1 of ITAA 1997. They are the rights that an entity has as (i) the patentee, or a licensee, of a patent; or (ii) the owner, or a licensee, of a registered design; or (iii) the owner, or a licensee, of a copyright. Consequently, amortisation is only allowed for specific items of IP, namely patents, registered designs and copyrights.

Trademarks, trade secrets, and undisclosed information are excluded from being depreciable assets. In defending this tax treatment Rider et al argued that ‘the fact that trade secrets, know-how and confidential information are not a form of property, in the conventional legal sense, leads to confusion in determination of their taxation treatment’. This view represents a legal viewpoint. Nevertheless, it does not justfy the denial of amortisation of purchased trademarks, know-how and confidential information. It only justifies the denial of amortisation for self-developed know-how, trademarks, and confidential information. A purchaser of those IP items incurs a significant amount of acquisition costs. Those items also participate in generating taxable income. At the same time, this tax treatment conflicts with the accounting treatment of purchased goodwill, which is broader than trademarks. Australian Accounting Standard No 18 allows a deduction for amortisation of purchased goodwill using the straight-line method up to 20 years. Accordingly, the tax treatment discourages taxpayers from acquiring those items of IP that are not amortisable under tax law.

With regard to the amortisation method, the uniform capital allowance provisions were introduced to the Australian ITAA 1997 in 2001. They allow the use of two methods

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87 Section 40-30 of the ITAA 1997.
89 See Michael Walpole ‘Proposals for the Reform of the Taxation of Goodwill’ (PhD Dissertation, University of New South Wales, Sydney – Australia, 2006), 164-165.
90 There are a number of depreciation methods which are similar to accounting methods which are used in calculating depreciation/amortisation. Also they are often applicable to various assets. Those methods are;
   i. Straight line method,
for depreciation of depreciable assets, the prime cost method which is similar to a straight-line method, or the diminishing value method. With regard to IP, the only applicable method is the prime cost method.

Determining the cost base of a depreciable asset for amortisation purposes is an important matter. Tax legislation uses historical cost. For example, the Australian ITAA 1997 identifies the elements of the cost base that are applicable to any type of depreciable asset. There are two elements. The first element cost is the cost incurred to acquire the assets, while the second element costs are the costs incurred after acquiring the asset.

The useful life of a depreciable asset is determined according to the expected economic life of the asset. With regard to IP, it is known that the useful life of any item is determined by specific legislation. For example the patent term according to the TRIPS agreement is 20 years. Therefore the economic useful life of a patent is 20 years. In line with that, s 40-95(7) of ITAA uses the statutory effective life for various types of patents and registered designs. However, a trademark has no definite useful life. As a result, the United States and Australian tax legislation deny an amortisation deduction for trademarks.

Under the Egyptian ITL 2005, amortisation of acquisition costs of transferred IP within a specific period is consistent with the accounting matching principle, as mentioned previously. This accounting treatment is set in place under the Egyptian Accounting Standard No 23 (hereafter, EAS). Moreover, according to ITA 2005, the accounting profit is the basis for working out taxable income. Nevertheless, the tax treatment for amortisation of IP subject matter deviates from accounting treatment.

With respect to the tax treatment of IP acquisition costs, Art. 25(2) of ITL 2005, allows a 10 percent amortisation allowance, including purchased goodwill. The straight line method is used. The acquisition cost is amortised over ten years. This tax treatment is newly introduced within the provisions of ITA 2005. Under the repealed ITL 1981,

ii. declining balance method
iii. Income forecast method, and
iv. Pooling of assets
v. Safe harbor

For more details see, see Carol Conjura et al, ‘To Capitalize or Not? The INDOPCO Era Ends with Final Regulations under Section 263(a)’ (2004) 100(4), Accounting and Tax Periodicals 215.

91 There are a number of approaches to evaluate the IP subject matters, such as the historical cost approach, income approach, real option approach and others. Such methods are being used for various purposes, however here the main concern is the tax purpose which relies on the historical cost for working out the amortisation amount.


94 For more details see EAS No. 23, paragraphs 97/106.
Depreciation allowances were tax deductible under Art 114 (5) however eligible assets and depreciation rates were governed by administrative rulings. In this regard neither administrative ruling 6/1986 nor 85/1997 had allowed depreciation for any intangible asset.

The Indian ITA 1961 provides a depreciation allowance for both tangible and intangible assets in accordance with s35 ITA 1961. According to this provision, various types of IP subject matters are eligible for depreciation. Those assets are aggregated into two blocks of asset (BOA) groups. One is for tangible and the other for intangible capital assets. The total value of the BOA is known as the written down value (WDV).95 The consideration or value of any new item of IP is added to the WDV and any proceeds from selling an IP item is deducted from it. The net of the WDV is multiplied by the depreciation rates which are provided in Appendix I of Tax Rule No 5 (ITA 1961). The intangible BOA is depreciated at the rate of 25 percent of WDV. Nevertheless, in a number of cases the Indian High Courts and Supreme Court have allowed immediate depreciation of lump sum payments relating to the transfer of IP. For example, in CIT v. British India Corporation Ltd, the Supreme Court held that the lump sum payment related to a trade mark could be expensed immediately. In Alembic Chemical Works Co. Ltd v CIT it was held that the lump sum payment related to know-how was a current expense.96 These judicial precedents encourage companies to acquire modern technology and to be involved in extensive R&D activities.

The above discussion shows that under the Australian ITAA 1997, a capital allowance for specific items of IP subject matters is tax deductible while it is not allowed for other items of IP. Moreover, the treatment in terms of depreciation methods and rates are not generous. Similarly the Egyptian newly introduced depreciation allowance for the acquisition costs of IP uses a straight line method and a low depreciation rate. However, the Egyptian legislation is a newly introduced provision and it might be good as a starting point. Nevertheless, a comparison between the Australian and the Egyptian capital allowance on the one hand, and the Indian capital allowance for tangible assets on the other hand, shows that the latter is more generous. In this respect Indian ITA 1961 provides a favourable tax treatment for intangible assets in comparison with tangible assets. The BOA of intangible assets is depreciated at 25 percent of the WDV while the tangible BOA is depreciated at 15 percent.97 Moreover, the judicial precedents sometimes go further in encouraging acquisition of IP through allowing a 100 percent depreciation rate of acquired IP. Such legal power is not available under the Egyptian legal system as a civil law country in which courts could not go beyond the legal provisions.

The acquired IP subject matter may be benefited through using it in carrying out R&D activities or in improving production process and technology transfer. Ultimately, those activities may lead to the development of new IP. Accordingly, specific amortisation scheme is required to encourage the use of new IP subject matters (e.g. patent and know-how). The previous discussion of the tax treatment of acquisition costs through allowing depreciation or amortisation showed the following:

95 For more details about Written Down Value (WDV) of the capital asset see s 43(6).
96 For more details see Chandrasekaran Prem sai and Natshanith Patil, above n 78, 50.
97 For more details see, s 35, Indian ITA 1961.
1. The Australian ITAA 1997 allows a deduction of capital allowance related to specific items of IP subject matter and denies it for other items, such as trade secrets and know-how. Moreover, it uses a prime cost method (straight-line) method for depreciating IP subject matter, and the useful life is determined by administrative rules. It is important to use a generous amortisation scheme which encourages using IP and it is important to include various items of IP rather than specific items.

2. The Indian ITA 1961 provides a generous amortisation scheme for intangible assets. The BOA of intangible assets is amortised at 25 percent (using a declining balance method). This type of treatment encourages businesses to use modern technology which improves productivity and the level of economic growth. Moreover, IP capital expenditures which constitute a part of R&D are a 100 percent tax deductible. Indian court cases as previously explained allowed 100 percent deduction of IP even though it was for capital assets in many cases. By contrast, the Egyptian ITL 2005 provides for depreciation of intangible assets which include IP on a straight line basis at 10 percent.

V THE ANALYSIS OF THE TAX TREATMENT OF SELF DEVELOPED IP UNDER THE AUSTRALIAN, EGYPTIAN AND INDIAN INCOME TAX LEGISLATION

A The Tax Treatment of R&D Expenses

The tax system plays an important role in stimulating R&D which leads to the development of domestic IP subject matters. Many developed and a few developing countries have paid attention to the necessity of tax incentives to stimulate R&D activities. The discussion below reviews the experiences of Australia, Egypt and India.

The current R&D tax treatment in Australia commenced in the mid-1980s when the Industry Research and Development Act 1986 was introduced. Sections 73B to 73Z of the ITAA 1936 contain the measures granting R&D tax incentives. Those measures identify the objectives of R&D tax incentives, and the techniques to achieve those objectives, by identifying the method of delivering tax incentives, eligible taxpayers and activities. The R&D tax incentives are based on using a tax allowance rather than a tax credit. The ITAA 1936 provides a R&D tax allowance as a tax incentive for R&D expenditure. Eligible companies can claim a 125 percent deduction for R&D expenditure. In addition, an extra 50 percent is available to companies that increase their level of R&D expenditure.

There are two levels of R&D tax allowances. The primary level provides a further 25 percent deduction for R&D expenditure, whether it is current or capital expenditure, as

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98 In this respect, s 73B of the ITAA 1936 identifies the objectives of this treatment as follows:

(a) Encouraging the development by eligible companies of innovative products, processes and services; and

(b) Increasing investment by eligible companies in defined research and development activities; and

(c) Promoting the technological advancement of eligible companies through a focus on innovation or high technical risk in defined research and development activities; and

(d) Encouraging the use by eligible companies of strategic research and development planning; and

(e) Creating an environment that is conducive to increased commercialisation of new processes and product technologies developed by eligible companies.
an incentive toward R&D. On the other hand, the incremental allowance gives an additional 50 percent deduction for current expenditure only, in accordance with s 73QA(2) of the ITAA 1936. For a company to be eligible for an incremental deduction, it must realise an increase in R&D expenditures above the average R&D expenditures in the previous three consecutive years in accordance with s 73QA(1) ITAA 1936.

An R&D tax incentive regime needs to identify eligible R&D activities, eligible expenditures and eligible taxpayers. Identifying eligible activities is the starting point for eligibility of the R&D tax incentives. It is important to identify what are eligible activities and whether the definition is based on the Frascati Manual or a different guide. Section 73B (1) ITAA 1936 defines R&D activity as:

a) Systematic, investigative and experimental activities that involve innovation or high levels of technical risk and which are carried on for the purpose of:
   i. Acquiring new knowledge (whether or not that knowledge will have a specific practical application); or
   ii. Creating new or improved materials, products, devices, processes or services; or
b) Other activities that are carried on for a purpose directly related to the carrying on of activities of the kind referred to in paragraph (a).

It is obvious that the definition is mainly concerned with those activities which relate to basic research, applied research and experimental research. Those activities have a high level of risk and lead to acquiring knowledge and to creating innovations.

There are two more elements associated with the scope of R&D incentives, the definition of the types of expenses and the definition of eligible taxpayers. As explained above, the Australian tax allowance (basic allowance of 125 percent) covers various types of expenditures: current expenditures, such as salaries, contract expenditures (in the case of outsourcing of R&D), feedstock and others.

The eligible taxpayers for the R&D tax allowance deduction are determined by s 73L of the ITAA 1936. Those taxpayers must register at the Industry Research and Development Board (IRDB), which was incorporated under the Industry Research and Development Act 1986. In order to be eligible for registration with the IRDB, a company must meet a number of criteria.

There is a threshold for a company’s R&D expenditure to be claimable. This threshold means that the total amount of R&D expenditure must be above A$20,000 in a taxable year, whether it is carried on in-house or outsourced. To claim a deduction for the extra 50 percent, the company must initially be eligible to claim the 125 percent deduction.

The current Australian R&D tax incentives were introduced in 1986 within the provisions of the ITAA 1936. They have been amended many times in order to make them more efficient and effective. However, there is no time limit for their implementation, which gives assurance to private business that the incentives are...

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continuous, encouraging them to be involved in long-term R&D projects. On the other hand, using a R&D tax allowance gives the opportunity to businesses to carry forward any losses that arise from business activities or as a result of deducting the R&D tax allowance.

The tax treatment under the Egyptian ITL 2005 for current expenditure is generally consistent with the accounting treatment according to Art.17 (Para 2) which states that ‘net profit is determined based on the income statement prepared according to the Egyptian Accounting Standards. The tax base is determined by applying the provisions of this law to the net profit’. Accordingly, there is no specific treatment of R&D within the provisions of the ITL 2005, despite the specific nature of R&D activities. The EAS No. 23 sets an accounting treatment for intangible assets. It distinguishes between research expenses and development expenses. The first are treated as current expenditures while the latter may be treated as either current expenditures or capital expenditures. In order to be treated as a capital expenditure, it must satisfy six conditions: (i) the company has carried out a pilot study for developing an intangible asset, (ii) the company intends to develop the intangible asset completely, in order to use or sell, (iii) the company has the ability to use or sell the developed asset, (iv) there is certainty with regard to the success of the project, (v) there is a certainty with regard to the potential benefits, and (vi) the company has the ability to measure the development costs separately. These conditions are difficult to satisfy with regard to R&D projects since R&D projects have a high degree of uncertainty. Therefore, the development expenses are treated as current expenditure in accordance with a conservatism principle. However, this treatment is only valid before the recognition of the intangible asset. Any expense incurred after the recognition shall be capitalised according to EAS 23.

Capital expenditure covers the depreciation allowances of scientific apparatus, lab fixtures, buildings, patents, etc. There are no specific provisions for a depreciation allowance of R&D equipment. They are subject to the general rule of depreciation which is set out in Art. 25. It provides a favourable tax treatment for machinery and equipment. This treatment of fixed assets encourages companies to acquire new assets and the most advanced technology. This favourable treatment of fixed assets depreciation may have a positive impact on those companies that carry out R&D projects too.

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100Egyptian Accounting Standards was issued in 1997 according the decree of the Minister of Economics, and they were updated in 2006 by a new decree of the Minister of Economics No 243/2006 (Arabic), <http://www.cma.gov.eg/cma/content/arabic/accounting_criteria/accounting_criteria.htm> at 20 October 2008.


102 It states three depreciation methods that are applicable to any capital asset regardless of its type of business usage. Those are:

i. Straight-line method, used for buildings (5 percent annually) and intangible assets (patents are written off within 10 years).

ii. Accelerated depreciation, for computers (50 percent), and

iii. A pooling of asset method, pursuant to which all other assets are added together and depreciated at 25 percent annually. In addition any new asset added to the pool for the first time, whether it is new or used, is eligible for a 30 percent deduction and then the net value is added to the pool.
The Indian ITA 1961 provides specific tax treatment of R&D activities. In this respect, s35 is applicable only to R&D expenses. It sets specific rules for the deductibility of R&D expenditures. Those rules cover both current and capital expenditures associated with R&D activities. Current expenditures of R&D are generally tax deductible. There are four types of deductions for current R&D expenditure. Under the first type 100 percent of R&D current expenditure is tax deductible. The second type is a 125 percent weighted deduction when it is paid for carrying out R&D by an Indian company that is mainly carrying out R&D activities, upon the condition that the project has been approved by a prescribed authority. The third type of deduction is effective in 2009/2010 and applies a deduction of 125 percent of the amount paid to a third party (specific scientific institutions) to carry out specific research projects on behalf of the assessee in accordance with s 35(2AA), upon the approval of the prescribed authority. The fourth type of deduction is related to R&D expenses of specific businesses which are biotechnology, manufacture or production of any drugs, pharmaceutical, electronic equipment, computers, and telecommunication equipment. These businesses are allowed a deduction for R&D expenditures at 150 percent of actual expenses, under specific conditions, which are laid down in s 35(2AB) (1). It is obvious that current expenditures of R&D have a favourable tax treatment. This type of tax treatment encourages businesses to be involved in more R&D activities.

Moreover, capital expenditures related to R&D enjoy a favourable tax treatment. In this context, capital expenses such as the acquisition costs of equipment, apparatus and other scientific devices as well as IP which are used in scientific research are wholly deductible in the year of acquisition if they are assigned to R&D activities. Therefore, the taxpayer is not allowed to claim depreciation for those capital assets under s 32. Acquisition costs of buildings and land which are used for a scientific purpose are not allowed according to s 35(2)(i). These are the general rules in India for deducting capital expenditures related to R&D.

B The Tax Treatment of Other Expenses

The R&D expenses are often expensed to develop a new product or process which may be patented, or produces know-how or a secret formula. However, other forms of IP, for example trademarks, are developed through advertising and other promotional activities. Deductibility of these expenses may be either within the domain of section 8-1 of the ITAA 1997 (current expenditure) or within the domain of ss 40-825 and 40-880 (capital expenditure).

When it is not current expenditure, it raises the issue of the income/capital dichotomy. In this respect, Gilders et al have identified four criteria for determining whether the expenditure is current or capital in nature. These are:103 Dixon’s criteria from Sun Newspapers, (ii) ‘mere realisation’ from California Copper Syndicate, (iii) nature of consideration given from receipts, (iv) fixed and circulating capital. Those criteria are in accordance with subsections 8-1(1) and (2) of the ITAA 1997, which provide the positive and negative limbs as explained previously.104

103 Frank Gilders, et al, above n 70, 91.
104 Ibid.
A similar approach exists under the Egyptian ITL 2005. According to EAS 23 (Para 63/64) any expense related to the development of a trademark is to be expensed on the current basis. This accounting treatment is acceptable under articles 17 and 51 of ITL 2005. This treatment is valid during the development process of IP subject matter. After recognition of a trademark, for example, any expenses incurred which relate to registration or legal fees, are capitalised and amortised in accordance with Art 25(2), as mentioned before.

The Indian ITA 1961 provides that other expenses are often expensed on the current basis in accordance with s 37 of ITA 1961. Nevertheless, drawing a line between capital expenses and revenue expenses related to IP is not an easy task. In many cases, the tax authority treats expenses as capital expenses, which means they have to be amortised over a specific period. On the other hand, companies prefer to expense this type of expenditure on a ‘current’ basis. Therefore, those expenses related to IP may be problematic, which creates many tax disputes. In this situation there is not a conclusive measure to implement. Therefore, identifying whether such expenses, particularly registration fees, are capital or current expenditure depends on the facts related to each case.

C Assessing the Role of Tax Legislation to Stimulate Self-developed IP

The discussion has revealed that a number of tax measures can be employed in relation to the development of IP. Those measures include the tax treatment of acquisition costs. In this context, below is a detailed analysis of the specific tax treatment for R&D activities.

The previous discussion of R&D tax incentives shows that there are two different approaches employed to deal with R&D expenditure in Australia, Egypt and India. Those approaches cover both current and capital expenditures. In this respect the differences are recapped below:

1. Under the Australian income tax regime; there are two levels of R&D tax allowances. The primary level provides a further 25 percent deduction for R&D expenditure, whether it is current or capital expenditure, as an incentive toward R&D. On the other hand, the incremental allowance gives an additional 50 percent deduction for current expenditure only, in accordance with s 73QA(2) of the ITAA 1936. For a company to be eligible for an incremental deduction, it must realise an increase in R&D expenditures above the average R&D expenditures in the previous three consecutive years in accordance with s 73QA(1) of the ITAA 1936. Nevertheless, the current system is under review, in order to improve it and achieve the desired objective efficiently. The proposed system provides a generous R&D tax incentive, where an 85 percent tax credit will be given to business. The first 45 percent will be non refundable while the remaining will be refundable.

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105 See GN Gopalrathnam, above n 74, 20-23.
2. With regard to current expenditure, the Egyptian ITL 2005 allows a deduction for R&D expenses in accordance with the accounting treatment. There is no specific tax treatment of R&D expenses. With regard to capital expenditures, the Egyptian ITL 2005 does not mention depreciation of tangible and intangible assets, which are employed in scientific research.

3. On the other hand, the Indian ITA 1961, via s 35, allows a deduction of an R&D allowance under different ratios as explained previously. The R&D tax allowance reflects a friendly tax policy towards R&D activities. With regard to capital expenses, s 35(1)(iv), allows a 100 percent deduction of the capital costs used in scientific research which encourages businesses to use advanced technologies in R&D activities. Moreover, the Bill of the New Direct Tax Code 2009 maintains the tax incentives for R&D activities, despite a movement towards an elimination of many tax incentives.107

VI Tax Treatment of the IP of Specific Business Types

A The Tax Treatment of IP of Free/ Export Processing Zones

There are a number of specific types of businesses which are developed for specific purposes. For example, free zones and export processing are commonly used in many developing rather than developed countries. This legal form does not exist in Australia; other legal forms are employed for different business activities as well as IP. In this respect, Rider et al, discussed in their study a number of legal forms which suit exploitation of IP, such as a spin-off company and pooled development funds (hereafter PDFs) and venture capital (hereafter VC).108 In Australia, the Pooled Developed Funds Act 1992 introduced PDFs in 1992, a legal form of business which enjoys a number of tax incentives under specific conditions.

The tax incentives granted to PDFs include a reduced tax rate on taxable income. In this respect income generated from venture capital is taxed at 15 percent and other income is taxed at 25 percent. Moreover, the capital gains generated from PDFs is tax free in the hands of partners. This legal form of business encourages, indirectly, investments by small and medium size enterprises (SMEs) in R&D activities which might lead to creation of IP.109

With respect to Egypt, even though the ITL 2005 tends to levy tax on various legal forms of business undertakings, there are exceptional rules, which are created particularly for specific businesses or purposes. In this context, the Egyptian Investment Guarantees and Incentives Law No. 8 of 1997 (hereafter IGIL 1997) classifies investment projects as internal investment projects (onshore projects) or free zones projects (offshore projects). The former type is subject to income tax in the same way as any other businesses. The latter type enjoys absolute tax exemption.110 Accordingly, IP business


109 Ibid.

110 See Art.35 of IGIL 1997.
transactions are not taxable at all. This means that the ordinary income which arises from licensing and capital gains are exempted from income tax. In addition, if there is an IP holding company carrying out its business in free zones, its income is exempted from income tax forever.

With respect to the Indian tax legislation, there are a number of tax incentives for investment projects, working in export processing zones established under the Export Processing Zones Act 1995 or special economic zones established under the Special Economic Zones Act 2005. Those business entities enjoy a number of tax incentives with regard to the exemption of export proceeds from income tax. Tax incentives include a 100 percent tax exemption for the first five years, followed by a 50 percent exemption for 2 years etc.111 These kinds of tax incentives are not specific to IP transactions or the R&D therein. On the other hand, specific tax incentives are provided to those companies whose main business is scientific research. According to s 80-IB(8A), those companies enjoy a 100 percent tax exemption for a five year period on their income derived from scientific operations.112 Those companies must register with a prescribed authority and meet the required conditions.113

B The Tax Treatment of IP of Venture Capital in R&D

A venture capital entity is a common legal business form, which developed and developing countries set specific measures to encourage, such as the Venture Capital Act 2002 in Australia. Under that law an important legal form can be established that is a Venture Capital Limited Partnership (VCLP). This legal form of business is suitable for specific type of business as well as IP activities.114 The VCLP enjoys a number of tax incentives under specific conditions. Those are: (i) exemption from capital gains, (ii) a discounted capital gain is provided to the partners of the VCLP, and (iii) specific tax rules for losses generated from the VCLP, which enables a partner to deduct their losses from other sources of income.115

A Venture Capital Company or business is a type of investment project which could be established under the Egyptian IGIN 1997. Accordingly, they were eligible for various types of incentives and guarantees. As a result of enacting ITL 2005, which eliminated various types of tax incentives, investment in venture capital is subject to income tax in the same manner as other businesses. Therefore there are no specific tax incentives for venture capital invested in scientific research.

111 For more detail see CCH above n 75, 184-185.
112 In this regard s 80-IB(8A) mentioned that “The amount of deduction in the case of any company carrying on scientific research and development shall be hundred per cent of the profits and gains of such business for a period of ten consecutive assessment years, beginning from the initial assessment year, if such company
(i) is registered in India;
(ii) has its main object the scientific and industrial research and development;
(iii) is for the time being approved by the prescribed authority at any time after the 31st day of March, 2000 but before the 1st day of April 2007;
(iv) fulfils such other conditions as may
113 For more details see Ruling No 168A of ITA 1961.
114 See Cameron Rider et al, above n 10, 38-40
115 Ibid.
On the other hand, the Indian *ITA 1961* provides tax incentives for specific projects involved in R&D activities, such as biotechnology, pharmaceutical etc., if they are established as a Venture Capital Company (VCC)/Venture Capital Unit (VCU). Section 10(23AB) grants a tax exemption to any VCC or VCU which is involved in seed research and development, biotechnology, R&D of pharmaceutical companies, etc. A temporary tax exemption for 5 years is granted to those companies whose income is driven mainly from scientific research, under the condition that those companies are registered with the Department of Scientific and Industrial Research and Development (Ministry of Science and Technology, Government of India). This tax exemption is granted in accordance with s 80 IB (10). The objective of this tax exemption is to mitigate the high level of uncertainty associated with this type of business activity.

The above discussion reveals that both the Australian and the Indian tax policy-makers are aware of the role which the tax system can play to encourage scientific research and the consequent development of new inventions, innovations and processes. Such new outputs lead to the development of new IP subject matter which may take a number of forms such as new patented products or processes, new scientific knowledge/know-how, etc.

**C Assessing the Tax Treatment of Specific Business Entities**

There are a number of specific legal forms of business which are available to specific type of businesses as well as IP businesses in both Australia and Egypt. In Australia there are the *PDFs Act* and *Venture Capital Act*. On the other hand, the Egyptian *ITL 2005* gives an absolute tax exemption to those undertakings that are founded in the free zones under *IGIL 1997*. This creates a good opportunity for tax planning as previously explained for any business activity. On the contrary, the Indian *ITA 1961* provides specific tax exemptions to scientific institutions or venture capital projects under specific terms. It is obvious that the Indian legislator is more concerned with scientific research and those activities which create a high level of positive externalities to the economy in general.

These types of business entities are important to encourage self development and exploitation of IP. However, specific measures are required in these countries which streamline establishment of these businesses which are directly connected to IP, particularly in Australia and Egypt.

**VII The Country’s Overall Tax Policy towards Taxation of IP**

The different tax treatments reflect a different approach to tax policy. The Australian tax policy makers are aware about the role of income taxation in stimulating R&D activities and possible development of new IP subject matters. This is reflected in granting tax incentives to R&D activities and the potential plans to improve R&D investment. However, it is important to pay more attention to other aspects which encourage development and exploitation of IP. This includes designing a new depreciation scheme for intangible assets in general, and particularly IP subject matter. Moreover, a generous package of tax incentives may be granted to those businesses specialising in R&D activities, and development of IP. This policy is a reflection of the efficiency criterion in dealing with market failure issues associated with self-developed IP.
On the other hand, the Egyptian tax policy is more concerned with broadening the tax base and lowering tax rates, which creates a neutral tax system. However, neutrality does not necessarily mean efficiency.\footnote{Jane G. Gravelle, *The Economic Effects of Taxing Capital Income*, (MIT Press, 1st ed, 1994), 62-68} An efficient tax system has to address the different levels of market failure associated with each type of business activity.\footnote{Ibid.} It may be difficult to address various levels of market failure; however there is a consensus among the majority of developed countries and some developing countries that undertaking scientific research is associated with a high level of uncertainty and market failure. Therefore the tax systems in those countries try to provide specific tax treatment for scientific R&D. For example, see the cases of Ireland and Luxemburg.\footnote{For more details see, Gary Cywie, Bertrand and Agnes Mongin-Weiss, ‘Luxembourg: An Attractive New Tax Regime for Income Deriving from IP Rights’ (2009) iam Magazine Building and Enforcing Intellectual property Value 155-157. < http://www.iam-magazine.com/issues/SupplementArticles.aspx?q=126c4e32-54a1-578b5966706490575e9&sp=allarticlesmagazine.com/issues/SupplementArticles.aspx?q=126c4e32-54a1-4578-b596-6706490575e9&sp=allarticles> at 6 July 2009.}

The Indian government has used this approach in providing a specific tax treatment for the development of IP (i.e. tax incentives for R&D expenditures) and for the use of IP (i.e. specific amortisation schemes for IP). Therefore, the Indian government pays more attention to the efficiency of their tax system. The importance of R&D activities has been confirmed also in the recent development of the Indian tax policy, through maintaining tax incentives related to R&D.

Moreover lowering tax rates and broadening the tax base is a type of tax competition which is known as “racing to the bottom” tax competition.\footnote{For more details see for example, Andre Fourcans and Thierry Warin, ‘Can Tax Competition Lead to a Race to the Bottom in Europe? A Sceptical View’ (2006) Middlebury College, Economic Discussion Paper, 06-04.} The question now for tax policy makers is what to do if neighbouring countries apply the same tax policy, or go further by making their tax rates lower than Egyptian tax rates. So a new mechanism for tax competition is needed and that mechanism requires providing specific tax treatment to scientific research which assists in developing domestic IP and encouraging foreign companies to invest in Egypt.

**VIII SUMMARY AND CONCLUSION**

IP is an important factor in achieving economic development through technology transfer and creating positive externalities in national economies. The strong measures of IP protection resulting from the implementation of the TRIPS agreement encourages business undertakings involved extensively in IP. This situation addresses a number of tax issues with regard to the capacity of income tax legislation to deal properly with those IP transactions in both developed and developing countries, which reflects the adequacy criterion. In order to review the tax treatment of IP transactions, this paper explored various types of IP transactions and their related tax treatment in Australia, Egypt and India.
IP business transactions often take one of the following forms: licensing and transfer, in addition to self-developed activities. The tax treatment of those transactions, particularly licensing and transfer, are often subject to ordinary tax provisions in the same way as other sources of income and related expenses. This reflects the concerns of each country to protect the tax base relating to IP business transactions. On the other hand, the tax treatment of the acquisition of IP, self-developed IP, and compulsory licensing of IP may vary from country to country, which reflects different tax policies towards encouragement of self-developed IP, hence dealing with the economic efficiency criterion.

The analysis of the tax treatment of IP under the Australian, Egyptian and Indian income tax legislation has revealed that a different approach is implemented by these countries, which reflects different income tax provisions and different tax policy attitudes. The Australian and Indian tax legislator is aware of the importance of IP and the necessity for specific tax treatment of IP. Therefore, Australian and Indian tax provisions reflect a tax policy which is more concerned with the efficiency of the tax system. This efficiency is tailored to deal with the high level of market failure and uncertainty associated with the development and use of IP.

Neutrality of the income tax system is not the optimal solution to deal with IP transactions. Moreover, racing to the bottom as a tax policy approach through lowering tax rates and broadening the tax base is not efficient in bringing foreign direct investment and to encourage investment in R&D. Accordingly, specific competition measures are required to compete with countries whose measures are related to encouraging Foreign Direct Investment (FDI) and domestic investment in R&D activities. Based on this argument, in order to maximise the current benefits of IP in developed countries and support the potential benefits of IP in developing countries, a tax system can contribute to these objectives through a number of measures which include:

1. Specific tax treatment of R&D through specific tax incentives, an important element for encouraging FDI and supporting domestic R&D activities;
2. A specific depreciation scheme, important for encouraging technology transfer and development of domestic IP;
3. More attention paid to providing favourable tax treatment to the proceeds of IP transfer, in particular for self-developed IP when it is transferred to spin off company;
4. Refraining from lowering the tax rate and broadening the tax base, as these steps would reflect an inefficient tax policy and create tax competition among neighbouring countries, and moreover may hinder future tax reform; and
5. Using specific legal forms such as venture capital, export processing zones or free zones to encourage specific industries which serve the development of IP rather than just commercial activities.