

Working Requirements for Complex Products under the Indian Patent System

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What are property “working” requirements?

- Legal requirement that a property be utilized by its owner or subject to penalty
 - Forfeiture
 - Compulsory license
 - Reduced remedies
- Utilization can include:
 - Local manufacture
 - Importation
 - Licensing
 - More?



India's Patent Working Requirement

India Patents Act, 1970, Sec. 83 (amended 2002)

- patents are granted to encourage inventions and to secure that the inventions are **worked in India on a commercial scale**
- they are not granted merely to **enable patentees to enjoy a monopoly for the importation** of the patented article
- the protection and enforcement of patent rights contribute to the promotion of **technological innovation** and to the **transfer and dissemination of technology**, to the mutual advantage of producers and users of technological knowledge and in a manner conducive to social economic welfare, and to a **balance of rights and obligations**

Natco Pharma v. Bayer (2013)

- **2005:** Bayer launches Nexavar (kidney/liver chemotherapy agent)
 - Monthly dosage US\$5,400
- **2008:** Indian patent issues
- **2011:** Natco petitions IPO for compulsory license
 - High cost in India
 - Lack of availability in India
 - **Non-working**
 - **Marketed dosages covered only 2% of Indian patients**
- **2012/13:** Compulsory license granted at 6/7% royalty
 - Bayer did not provide evidence why Nexavar could not be manufactured in India
 - Bayer had Indian manufacturing facilities for other drugs in India
 - Even with *importation*, supply did not meet local demand
 - Is important working?



Compulsory License

India Patents Act, 1970, Sec. 84(1)

(1) At any time after the expiration of **three years** from the date of sealing of a patent, any person interested may make an application to the Controller for grant of **compulsory licence** on patent on any of the following grounds, namely:—

- (a) that the reasonable requirements of the public with respect to the patented invention have not been satisfied, or
- (b) that the patented invention is not available to the public at a reasonably affordable price, or
- (c) that the patented invention **is not worked** in the territory of India

The Working Reporting Requirement

India Patents Act, 1970, Sec. 146(2)

every patentee and every licensee (whether exclusive or otherwise) shall furnish in such manner and form and at such intervals (not being less than six months) as may be prescribed statements as to the extent to which the patented invention has been worked on a commercial scale in India

Form 27 (Patents Rules 2003, Rule 131)

(i) *The patented invention:*

{ } *Worked* { } *Not worked*

a. *if not worked: reasons for not working and steps being taken for the working of the invention.*

b. *if worked: quantum and value (in Rupees), of the patented product:*

i. *manufactured in India*

ii. *imported from other countries (give country wise details)*

(ii) *the licenses and sub-licenses granted during the year;*

(iii) *state whether the public requirement has been met partly/adequately/to the fullest extent at reasonable price.*

Criticisms of India's Form 27 Regime

- *Post-Natco*, advocates claim that Forms 27
 - Were not publicly available
 - Often not filed
 - Did not make adequate disclosure
- Public Interest Litigation (2015) - Shamnad Basheer
 - Seeks to compel Controller of Patents to correct Form 27 system
 - “blatant disregard” for filing requirements
 - Complete lack of enforcement

Research Questions

- Are patentees complying with Form 27 filing requirements?
- How many patents are being worked and by whom?
- What do Forms tell us about how patents are being worked in India?
- Is Form 27 a useful tool:
 - To ensure patent working?
 - To facilitate compulsory licensing?
 - For anything at all?

Indian Mobile Device Patent Landscape (Contreras & Lakshane (2017))

- Identified all Indian patents/published applications (thru Feb. 2015) covering mobile device technologies
- 23,500 total patents and apps
 - 4,000 issued patents
 - 19,500 published apps
- Owned by Indian cos?
 - 50 patent apps of 23,500
 - Approx. 0.00%



*Indian Patents and Applications in the Telecommunications Patents
Top Assignees (2000-2015)*

Assignee	Nationality	Total Published Indian Applications and Issued Patents
Qualcomm	USA	5,954
Ericsson	Sweden	1,843
Samsung	Korea	1,827
Nokia ¹⁶⁸	Finland	1,744
Microsoft	USA	1,557
Philips	Netherlands	1,460
Sony	Japan	1,235
Alcatel-Lucent	France	971
Motorola	USA	842
LG	Korea	791
RIM/Blackberry	Canada	782

A Deep Dive into Form 27

- 4,419 issued Indian patents thru 2015 in the mobile device sector
- Form 27 is legally required for every patent every year after issuance
- IPO “encouragement” of compliance only began in 2012
- Forms 27 began to appear online in 2012
- Searched each patent via Indian Patent Advanced Search System (“InPASS”) and Indian Patent Information Retrieval System (“IPAIRS”) to identify filed Forms 27
- Two Right to Information (RTI) petitions; sporadic appearance of forms
- Manually entered data from each field and coded all entries, eliminating duplications

Gross Results

- **4,936** Forms 27 collected
- Covering **3,126** individual patents
- By **40** different patent holders
- Filed from 2004-2016

Figure 1
Patent Issuance and Form 27 Filing, by year

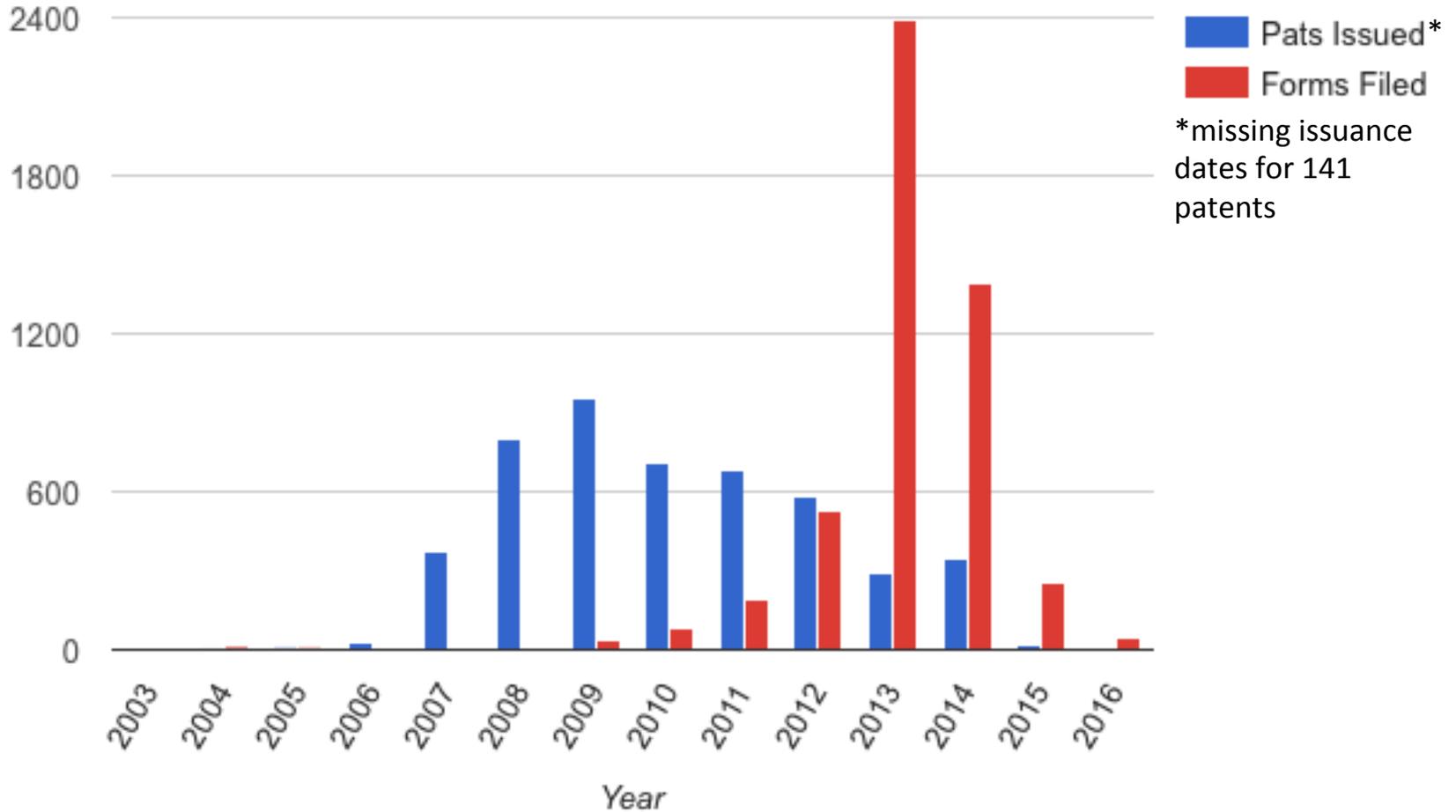
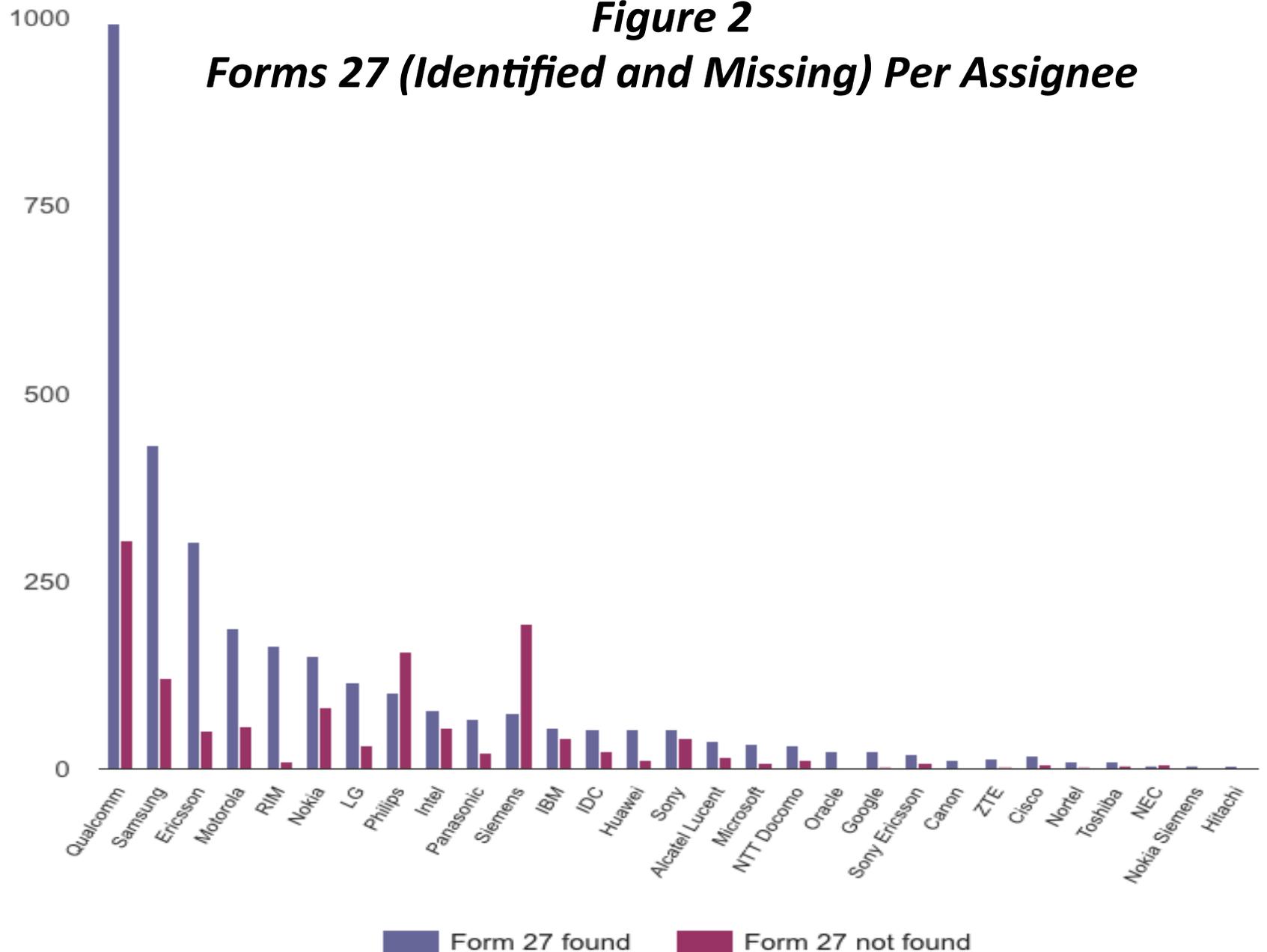
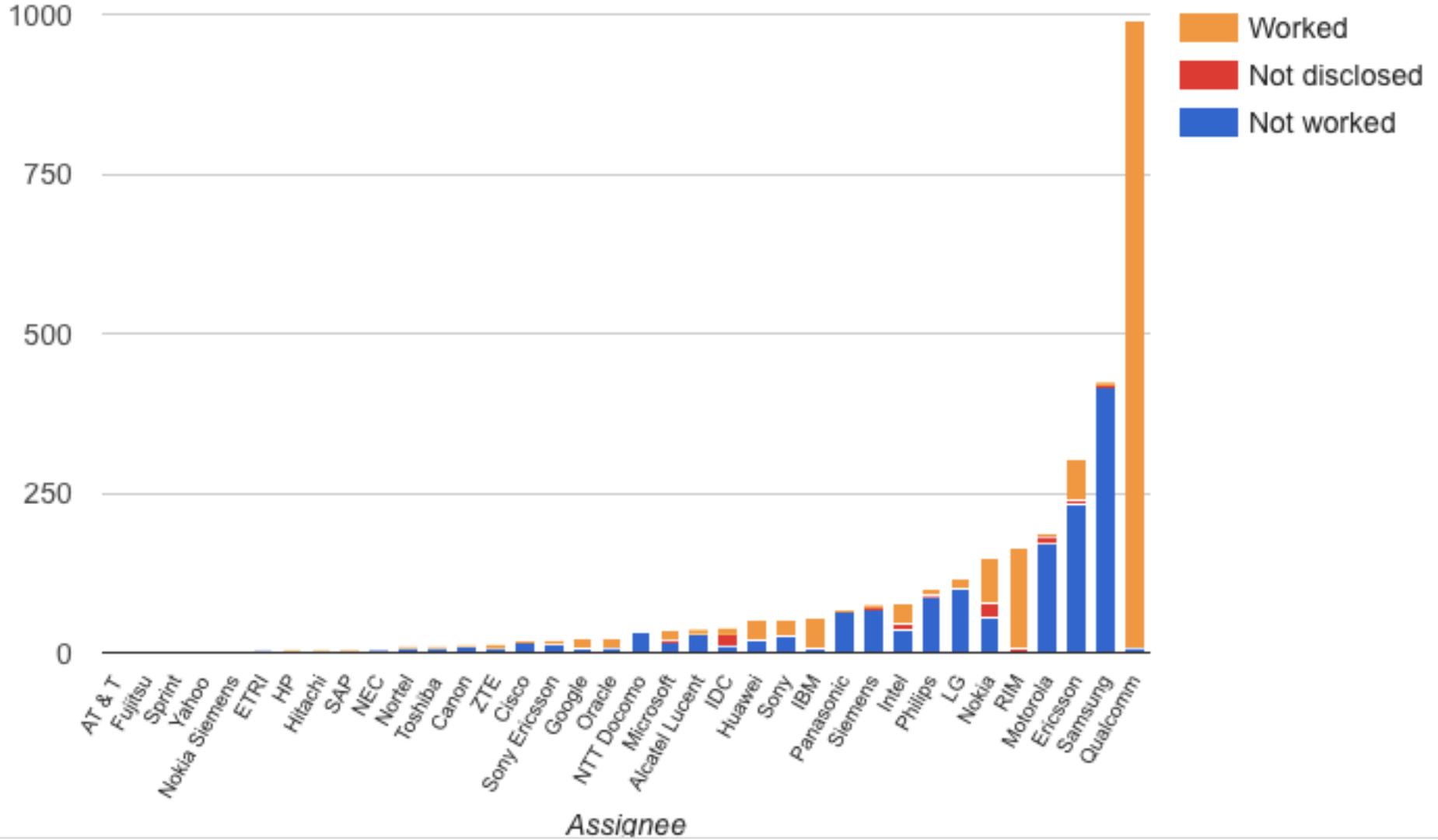


Figure 2
Forms 27 (Identified and Missing) Per Assignee



	Assignee	Issued patents (mobile device)	Patents for which a Form 27 was found	Patents for which a Form 27 was not found	Total Forms 27 found
1.	Qualcomm	1298	993	305	1327
2.	Samsung	551	430	121	621
3.	Ericsson	354	303	51	619
4.	Motorola	243	187	56	421
5.	RIM	172	163	9	327
6.	Nokia	232	150	82	202
7.	LG	147	115	32	173
8.	Philips	256	101	155	108
9.	Intel	132	78	54	151
10.	Panasonic	88	66	22	104
11.	Siemens	268	75	193	108
12.	IBM	95	54	41	80
13.	IDC	75	52	23	94
14.	Huawei	63	52	11	89
15.	Sony	94	53	41	80
16.	Alcatel Lucent	53	37	16	39

Figure 3
Working Status, by Assignee



Approaches to Form 27

Alcatel-Lucent (53 patents, 37 with forms)

Worked: 8

Not worked: 29

Description “not worked” [non-responsive]

As and when there is a specific requirement, the patent will be worked.

Description “worked” [non-responsive]

The patentee is unable to particularly determine and provide with reasonable accuracy the quantum and value of the patented invention worked in India, including its manufacture and import from other countries during the year 2014.

Approaches to Form 27

Canon (12 patents, 12 with forms)

Worked: 2

Not worked: 10

Description “not worked” [non-responsive]

none

Description “worked” [non-responsive]

Information not readily available, efforts will be made to collect and submit further information, if asked for.

Approaches to Form 27

Ericsson (354 patents, 303 with forms)

Worked: 65

Not worked/not disclosed: 238

Description “not worked” [ambiguous]

The patentee is in the look out for appropriate working opportunities in a large scale although there may have been some use of the patented technology in conjunction with other patented technologies.

(v1) There is a **cross license agreement** between Ericsson and at least one licensee, giving mutual rights to produce despite monopoly afforded by patents that are hold by any of the companies. There is **no information available** on whether the technology of said patent is included products sold by such licensee. As all the licenses are confidential in nature, the details pertaining to the same shall be provided under specific directions from the Patent Office.

(v2) Ericsson has entered into **global portfolio license agreements** with parties for both implementation patents and for standard essential patents. At present, Ericsson has executed more than 100 agreements in respect of its patent portfolio. There is no information available on whether the technology of said patent is included in products sold by such a licensee

Ericsson, cont.

Description “worked” (v1 - **specific**)

[**working**] Ericsson’s history in India goes back 112 years during which period Ericsson has contributed immensely to the telecommunication field in India. Ericsson provides, maintains and services network for several major government and private operators in India. At present, Ericsson has more than 20,000 employees across 25 offices in India. Further, Ericsson has established manufacturing units, global service organization and R&D facilities in India. Thus, patents which read on network/infrastructure equipment are worked by Ericsson itself as it is involved in manufacturing equipment, setting up and maintenance of network for several operators. Further, patents which read on devices are worked by several licensees of Ericsson who are currently operating in India.

[**Revenue**] Ericsson’s net sales in India during 2015 amount to: Networks: 8.083 Billion SEK and that approximate 61.70 Billion Rupees (1 SEK approximately being 7.63 rupees) ...

[**Tech**] IN 203034 relates to a **speech encoding method** and encoder which is efficient even at low bit rates as it first determines optimum gains of a plurality of consecutive sub-frames followed by vector quantization of said optimum gain parameters...

Ericsson, cont.

Description “worked” (v2 – generic)

[*working*] The said patent is one among the plurality of patents associated with a single product or plurality of products sold by Ericsson in India.

Accordingly it is close to impossible to provide an indication of specific or even close to accurate financial value of the said patent in isolation because of the said situation.

The products under the aforesaid patent have been worked at least by way of importation to India.

The various patents of Ericsson represent technologies which need to be used with various other technologies of Ericsson in a single or plurality of products. The technology platforms are extremely complex and difficult for evaluation in terms of specific numbers also.

[*Revenue*] It may be noted that Ericssons total product sales in India during 2014 amounts to: Networks: 4.079 Billion SEK and that approximately corresponds to 36.26 Billion Rs (1 SEK approximately being 8.89 Rs)

Summary of Observations

- Responses range from **incomplete/non-responsive** to **generic** to **specific** (very few)
- Even the most detailed Forms are incomplete
- Filings are not made every year

Does Form 27 Work?

1. Clerical/Technical

- Significant improvement needed to upload and make all Forms available and searchable
 - At least to IPO
 - Also to public

2. Compliance

- Is anybody monitoring compliance?
 - Failures to file?
 - Incomplete information
 - Generic and non-compliant forms
- Penalties for non-compliance?
- Why don't licensees file?

3. What are the Legal Standards?

- What counts as working? [*Natco* – case-by-case]
 - Importation?
 - Licensing? (in India vs. worldwide)
 - Enforcement?
- Why is market information requested?
- Why is an explanation of non-working requested?
 - Is there excusable non-working?
- How is the “public requirement” being measured?
 - What are the consequences of not meeting it?

Do (Patent) Working Requirements Work?

For single-patent products (drugs)

- Compulsory Licensing regimes already exist for local access
- Forms/disclosure
 - Probably no real benefit (global products are known, patent are public, disclosures add little)
- Local manufacture?
 - Could be effective in capacity building, but...
 - Practical from a global standpoint?

→ Working may be unnecessary, but not too harmful



Do (Patent) Working Requirements Work?

For multi-patent products (electronics)

- Case for compulsory licensing is less compelling (public need)
- Access to single patents won't enable production of full product (or even most components)
 - Is capacity building realistic thru working?
 - Inefficient (impossible) concentration of all manufacturing in every country?
- Owner of one patent may not even be able to manufacture a complete product. How to work?
- Unintended forcing function of working requirements
 - Local products may be available, but infringing
 - **Vulnerability to forfeiture/compulsory license may incentivize enforcement by patentees**
 - Ericsson?

→ As currently conceived, India's patent working makes no sense



Limited Effectiveness of Working Requirements

- Disclosure forms not necessarily useful or informative
- Local manufacturing requirements clashes with global markets and supply chains
- For **access**
 - Working not necessary for critical needs (drugs)
 - For nice-to-have products, competition may suffice
- Local industry and capacity building
 - Working patent-by-patent will not be effective
 - Impractical to create entire industries country-by-country
 - Discourage protectionism...
- **Forcing function to litigation – inefficient and risky for locals**

Is Procedural Working the Answer?

- Real property/adverse possession
 - *Monitoring* property usage is no longer a challenge
- Prevent “sleeping” on rights
 - *Procedural* working suffices
- **Abolish the requirement of actual patent use**
 - **Multi-patent products**, working is not reasonable
 - So why retain it for single-patent products?

Thank you!

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