

**Bangalore IT.In  
ISA Conference with STPI  
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**Legal Framework of Patents & IP Rights  
The Differentiator for Technology Creation**

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# Agenda

- I. Overview of IP Rights**
- II. The Policy Considerations**
- III. Understanding Patent Rights**
- IV. The Grant Process**
- V. Use of Patents in Different Stages of a Business**
- VI. Thinking Strategically on Patents**
- VII. Case Studies (Lexar Media, Inc. and Wireless LAN)**
- VIII. Questions and Answers**

# I. Overview of IP Rights

- **Copyright Law**
  - **Protects against copying of ‘creative’ works (books, music, etc.)**
  - **Not generally suited to protect ‘functional’ aspects**
  - **Registration simple, yet not required in many country**
  - **Term: Long**
  
- **Trademark Law**
  - **Protects ‘marks’ identifying the source of products/services**
  - **Avoid confusion in channels of trade**
  - **Term: Infinite**

**Cont..**

# **I. Overview of IP Rights (Cont..)**

- **Trade-secret Law**
  - **Client lists, formulas, know-how, any information**
  - **Demonstrate expectation of confidentiality**
  - **Term: Potentially infinite**
  - **Defenses: Independent discovery**
- **Mask-works**
  - **Protects the layout of the components**
  - **Not the function**
- **Patents**
  - **Protects the function/property/structure/process**
  - **Term: 20 years from the date of filing of the application**

## **II. Policy Considerations (Cont..)**

- **Rooted in ‘public policy/interest’**
  - **Default: Free flow of ideas leads to efficiencies**
  - **IP is a barrier**
  
- **Balancing of**
  - **Cost associated with the barrier**
  - **Possibility that the protected entity will not reach the public**

**Cont..**

## **II. Policy Considerations (Cont..)**

- **Different considerations in different areas**
  - **Food/drugs vs. Hardware vs. Software**
  - **Variables: Extreme necessity vs. Cost of discovery vs. production**
- **Patents will be the strong protection and also big barrier**
  - **Decreasing barriers: Language/distance/capital/market access**

# III. Understanding Patent Rights

- **Right to exclude others (NOT a positive right)**
  - **Injunction**
  - **Damages and/or Compulsory Licenses**
  - **Preventing importation**
  - **Term: 20 years from filing date**
- **New and unobvious over ‘prior art’**
  - **‘Prior art’ = what is in the possession of the public (knowledge base of the public) on filing date**
- **Content of patent application**
  - **Claims (Defines the scope of protection)**
  - **Supporting description**

Cont..

# III. Understanding Patent Rights (Cont..)

- **Example (1) –**

**Prior Art:** Just tree trunks and stones over which people sit

**Product:** A stool (featuring a base and legs to support the base)

**Difference/Claim:** a leg supporting a base

**Coverage:** Stools, chairs with legs or even single base support

**Valid Claim:** Analysis

- **Example (2) –**

**Prior Art:** Charcoal

**Product:** Ink Pen (featuring ink, writing tip and holder)

**Differences:** (a) holder holding a writing material; and

(b) a tip at which the writing material is dispensed

**Patent right COULD Cover:** Pencils, ink pens, Ball-pens, Quill-pens

Cont..



# III. Understanding Patent Rights (Cont..)

- **SCOPE OF PROTECTION**

The **CLAIMED** difference from the **PRIOR ART**

Irrespective of where/how it manifests

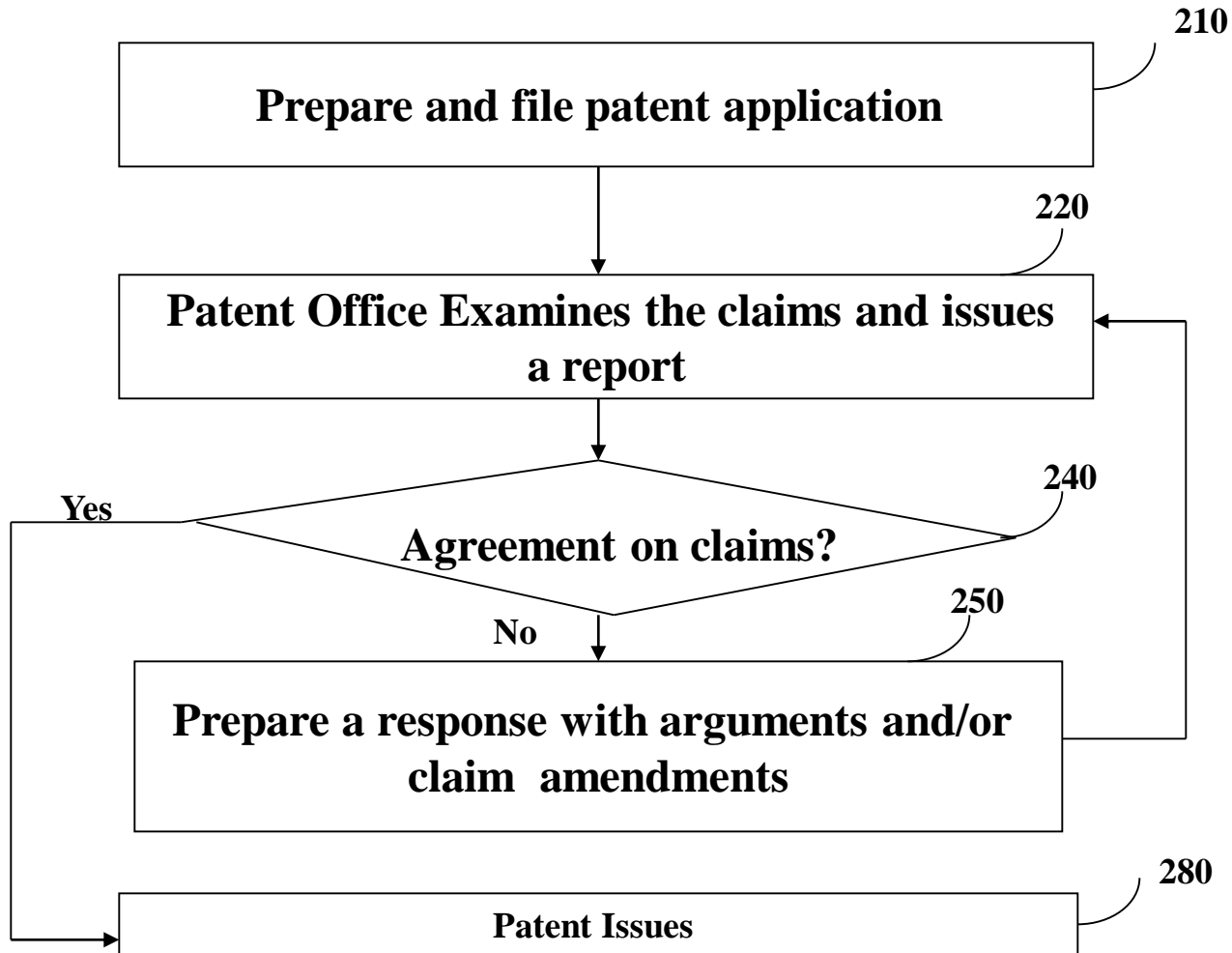
**NOT** what was in prior art

- **BROADER THAN THE DESIGNED PRODUCT/SERVICE**

- **Not claimed -→ Dedicated to the public**

  - **Thinking of the practitioner could matter**

# IV. The Grant Process



# V. Use of Patents in Different Stages of a Business

- **Upon identification of a space/product/service**
  - **While Discussing with potential partners**
- **When an investor invests**
  - **Concern: inventor potentially leaving the company**
- **Barrier for new entrants into the same space**
  - **Discourage new investments**
- **When the enterprise has deep pockets**
  - **patent as a defensive instrument**
- **Deterrent against injunction sought by a competing company**
- **Protect your market share**

Cont..

# V. Use of Patents in Different Stages of a Business (Cont)

- **Acquisition**
  - Patent portfolio part of the valued assets
- **Going IPO**
  - SEC filings in US
  - Investor confidence of existence of barriers
  - Validation of technical space
- **Royalties/licensing**
  - Cisco, MCI
  - Big Players Approach: Portfolio building and cross-licensing

Cont..

# **V. Use of Patents in Different Stages of a Business (Cont)**

- **As a source of competitive intelligence & state of the art**
  - **Implication of absence of patent filings in India!**
  
- **Attracting Talent/Attention**
  - **Employer Consideration**
  - **Consumer Products Space**

# VI. Thinking Strategically on Patents

- **Identify “the space” early AND apply for patents soon**
  - **Broader claims since less prior art to overcome**
- **No requirement to implement**
  - **However application must contain an enabling disclosure**
- **Need not originate from ‘technologists’**
  - **Who can recognize the problem/opportunity first**
- **Implement a process within the organization to identify inventions**
- **Technology need not be complex**
- **Use acquisitions/licensing intelligently, if needed**

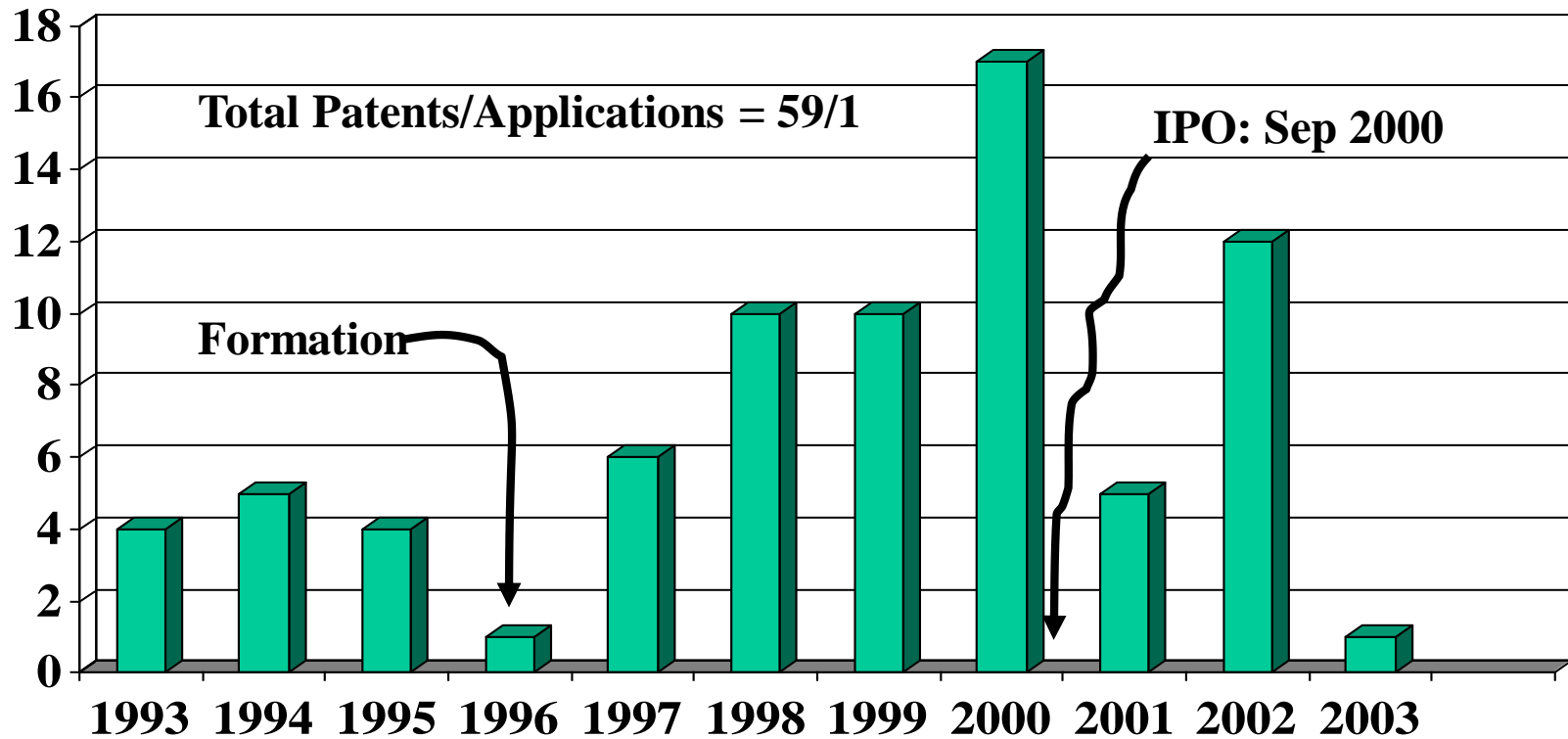
# **VII. Case Study – Lexar (Profile)**

- **Formed in 1996 by a few ex-Cirrus Logic Executives**
- **Went public (NASDAQ::LEXR) Sep 2000**
- **Present Market Cap: US \$ 650M**
- **Headquarters: Fremont, CA**
- **Primary Market: Digital media and other flash based storage products  
- consumer markets primarily**
- **Full time employees: 291**
- **Patent Litigation: Sandisk (NASDAQ::SNDK)**

**Cont..**

# VII. Case Study – Lexar (Cont..)

## (Filing Pattern)



Cont..



# VII. Case Study – Lexar (Cont..)

## (Forward Citations)

**Forward Citation (FC):** When the patent is cited in examining a later case  
- More → fundamental technology → Valuable

No.	Patent Number	FC Count
1.	US6721819	41
2.	US6901457	40
3.	US6950918	27
4.	US6580638	18
5.	US6426893	17

Cont..

## **VII. Case Study – Lexar (Cont..)**

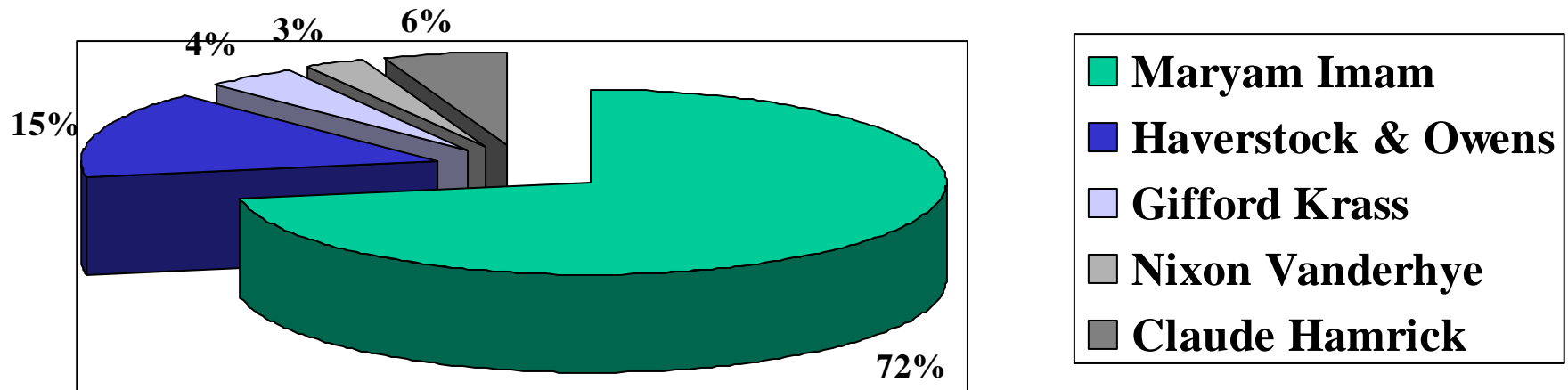
### **(Key Inventors)**

<b>No.</b>	<b>Inventor</b>	<b>Count</b>	<b>% (of total inventors)</b>
<b>1.</b>	<b>ESTAKHRI; PETRO <u>(CTO)</u></b>	<b>50</b>	<b>31.4 %</b>
<b>2.</b>	<b>IMAN; BERHANU</b>	<b>18</b>	<b>11.3 %</b>
<b>3.</b>	<b>ASSAR; MAHMUD</b>	<b>17</b>	<b>10.7 %</b>
<b>4.</b>	<b>SINCLAIR; ALAN WELSH</b>	<b>9</b>	<b>5.6%</b>

**Cont..**

# VII. Case Study – Lexar (Cont.)

## (Law Firms)

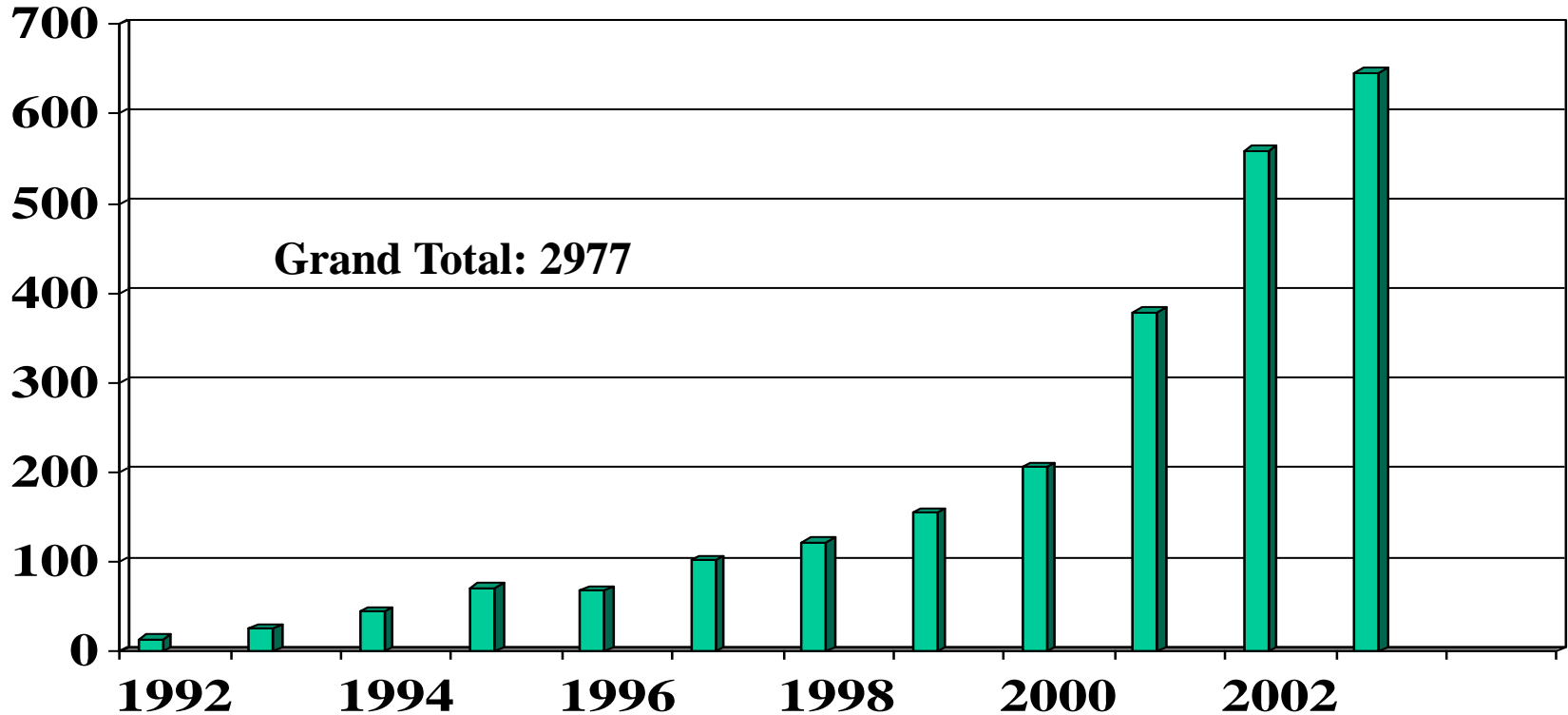


# VII. Case Study – Wireless LAN

- **Search Strategy:**
  - **(802.11 or WLAN or (wire\*less and (LAN or (local network) or (local area network)))**
  - **Included only US Patents and Published Applications**
  - **Search matched 1162 patents/2,977 records**
- **Match break-up**
  - **802.11 alone: 234 patents/579 total**
  - **WLAN alone: 109 patents/ 705 total**
  - **802.11 AND NOT WLAN: 199 patents/ 475 total**

**Cont..**

# VII. Case Study – Wireless LAN (Filing Pattern)



Cont..

# VII. Case Study – Wireless LAN

## (Assignees)

<b>No.</b>	<b>Assignee</b>	<b>Count</b>	<b>%</b>
<b>1.</b>	<b>NONE</b>	<b>1138</b>	<b>37.5%</b>
<b>2.</b>	<b>IBM</b>	<b>100</b>	<b>3.3%</b>
<b>3.</b>	<b>NEC CORPORATION</b>	<b>56</b>	<b>1.8%</b>
<b>4.</b>	<b>INTERDIGITAL TECHNOLOGY CORPORATION</b>	<b>65</b>	<b>2.1%</b>
<b>5.</b>	<b>SAMSUNG ELECTRONICS CO., LTD</b>	<b>46</b>	<b>1.5 %</b>
<b>6.</b>	<b>SONY CORPORATION</b>	<b>31</b>	<b>1.0 %</b>
<b>7.</b>	<b>BROADCOM CORPORATION</b>	<b>29</b>	<b>0.9 %</b>
<b>8.</b>	<b>MOTOROLA, INC.</b>	<b>42</b>	<b>1.3</b>
<b>9.</b>	<b>MICROSOFT CORPORATION</b>	<b>30</b>	<b>0.9%</b>

Cont..

## **VII. Case Study – Wireless LAN**

### **(Assignees) (Cont..)**

<b>No.</b>	<b>Assignee</b>	<b>Count</b>	<b>%</b>
<b>10.</b>	<b>PHILIPS</b>	<b>29</b>	<b>0.9 %</b>
<b>11.</b>	<b>CISCO TECHNOLOGY, INC.</b>	<b>26</b>	<b>0.8 %</b>
<b>12.</b>	<b>ADVANCED MICRO DEVICES, INC.</b>	<b>27</b>	<b>0.8 %</b>
<b>13.</b>	<b>AT&amp;T CORP.</b>	<b>23</b>	<b>0.7 %</b>
<b>14.</b>	<b>KABUSHIKI KAISHA TOSHIBA</b>	<b>22</b>	<b>0.7 %</b>
<b>15.</b>	<b>TEXAS INSTRUMENTS INCORPORATED</b>	<b>23</b>	<b>0.7 %</b>
<b>16.</b>	<b>INTEL CORPORATION</b>	<b>27</b>	<b>0.8 %</b>
<b>17.</b>	<b>3COM CORPORATION</b>	<b>24</b>	<b>0.7 %</b>
<b>18.</b>	<b>NOKIA CORPORATION</b>	<b>24</b>	<b>0.7 %</b>

# VII. Case Study – Wireless LAN

## (Inventor Countries)

No.	Country	Count	%
1.	USA	1940	60.7%
2.	Japan	326	10.2%
3.	Rep. of Korea	129	4.0%
4.	Taiwan	126	3.5%
5.	Israel	71	2.2%
6.	China	20	0.6%
7.	India	10	0.3%

Cont..



# VII. Case Study – Wireless LAN

## (Key Inventors)

No.	Inventor	Count
1	KOBAYASHI, YOSHIKAZU	28
2	CHOI, SUNGHYUN	22
3	BENVENISTE, MATHILDE	17
4	KARAOGUZ; JEYHAN	17
5	CHITRAPU, PRABHAKAR R.	14
6	DAVIS; GORDON TAYLOR	14

Cont..

## **VII. Case Study – Wireless LAN (Key Inventors) (Cont..)**

<b>No.</b>	<b>Inventor</b>	<b>Count</b>
<b>7</b>	<b>MAHANY; RONALD L</b>	<b>14</b>
<b>8</b>	<b>SESHADRI; NAMBI RAJAN</b>	<b>14</b>
<b>9</b>	<b>BI; DEPENG</b>	<b>13</b>
<b>10</b>	<b>STRUHSAKER, PAUL F</b>	<b>13</b>
<b>11</b>	<b>WARE; MALCOLM SCOTT</b>	<b>13</b>
<b>12</b>	<b>CROMER; DARYL CARVIS</b>	<b>12</b>

# VIII. Questions and Answers

**Thank You!**  
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