Patent Valuation

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Things to remember before we begin thinking about patent valuation for a transaction

1. It’s a negotiation
2. We are dealing with people and groups of people
3. Everyone has a different value in mind, guess, hunch, belief or wish
4. Motivations will be not be purely business driven
5. Transactions have specific drivers

However, we need to establish our acceptable outcome and appreciate the reasoning behind our starting point and agreement flexibility.

X++ TRY

Z- - TRY

X TRY

Z TRY

X+ TRY

Owner

Buyer

Z- TRY

Things to remember before we begin thinking about patent valuation for a transaction

1. Patent Value (or benefit can be in a number of forms)

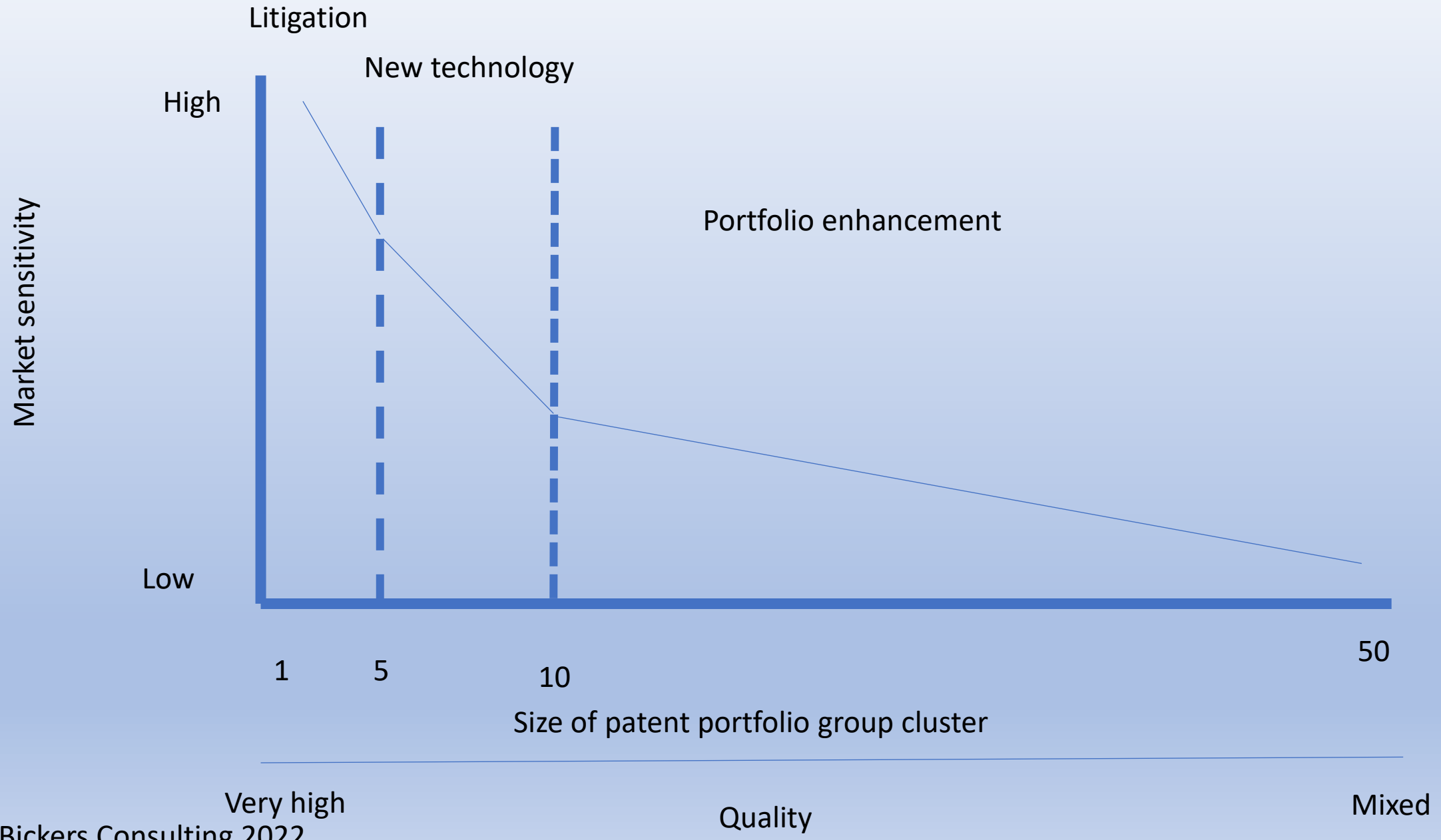
Money (cash now or future), market share (monopoly or security for small business), brand (reputation), assertion defence, investor confidence (spin-out), joint venture %, R&D justification, standards, patent pools and cross licence .

2. A patent gives legal rights and the costs and benefits reflect the costs of professional legal services industry.

3. 5% of patents have ‘strategic value’ (key to a products success), 95% commodity patents (add patent portfolio volume or weight).

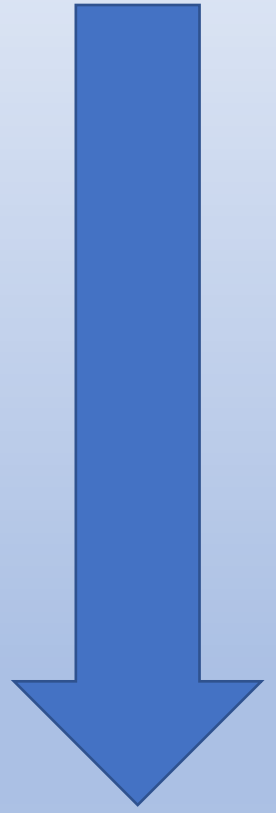
4. Safe to be sceptical avoid hopes and dreams clouding the facts.

The size of the portfolio and potential markets



What does quality mean in this context?

- Suspected infringement
- Technical proof pack
- Legal proof pack
- Claims charts
- Potential value of infringement
- Multiple infringers
- Patent office opinion (sometimes)
- Litigation won/settled. Proved in the courts



Quality and value

Example windows of market opportunity

Company A in patent litigation with company B, your patents reads onto product of company A. Litigation offset.

Company A is renewing a cross licence with company B, there is an Imbalance now and cash will need to compensate.

Company A is slow to market and has a patent portfolio gap missed R&D.

New start-up want to strengthen patent portfolio for investor assurance.

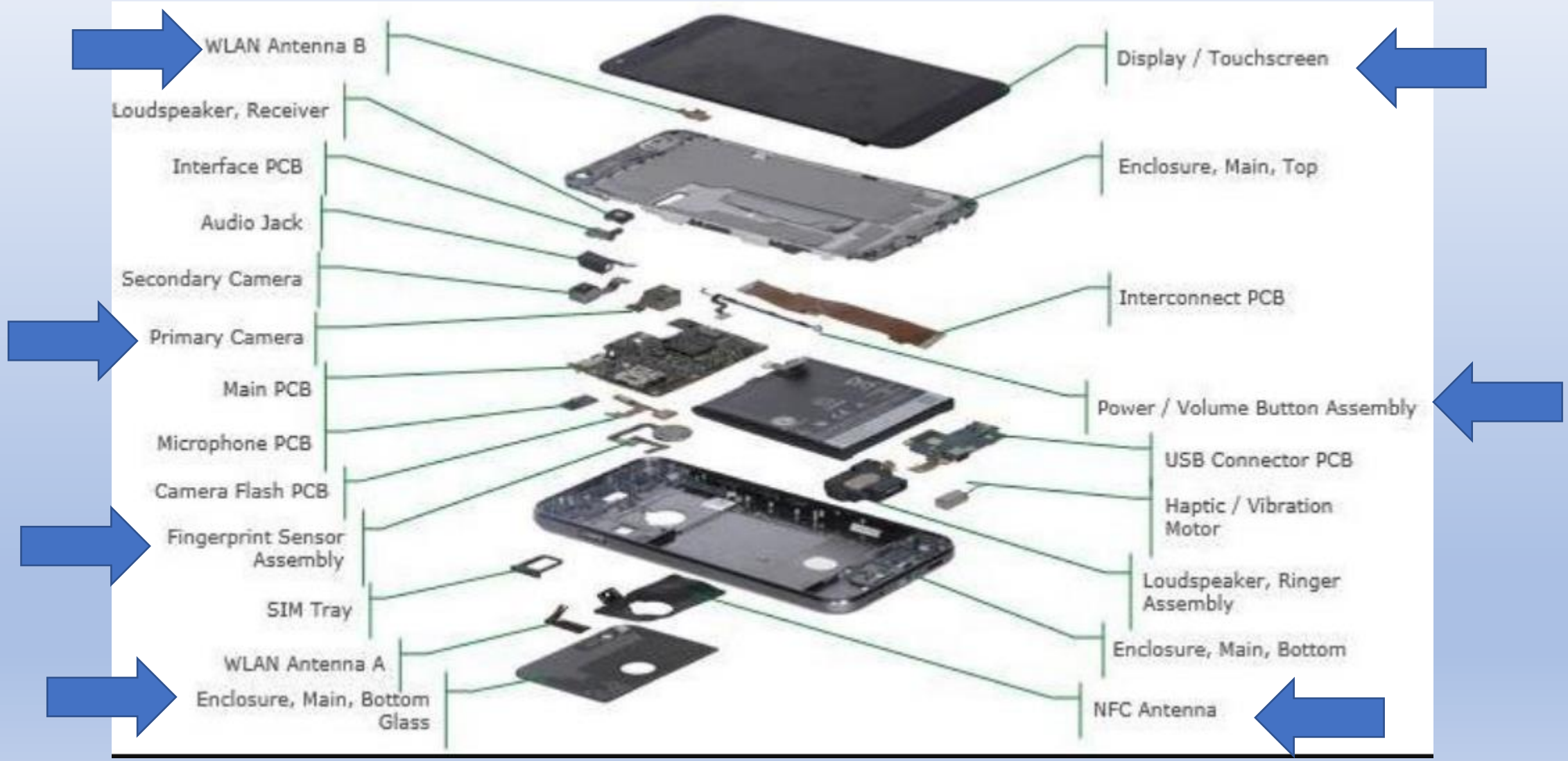
Launching a new start-up.

Need market insight, good connections, good relations and brand/reputation
A strong brand and reputation can cause market pull,

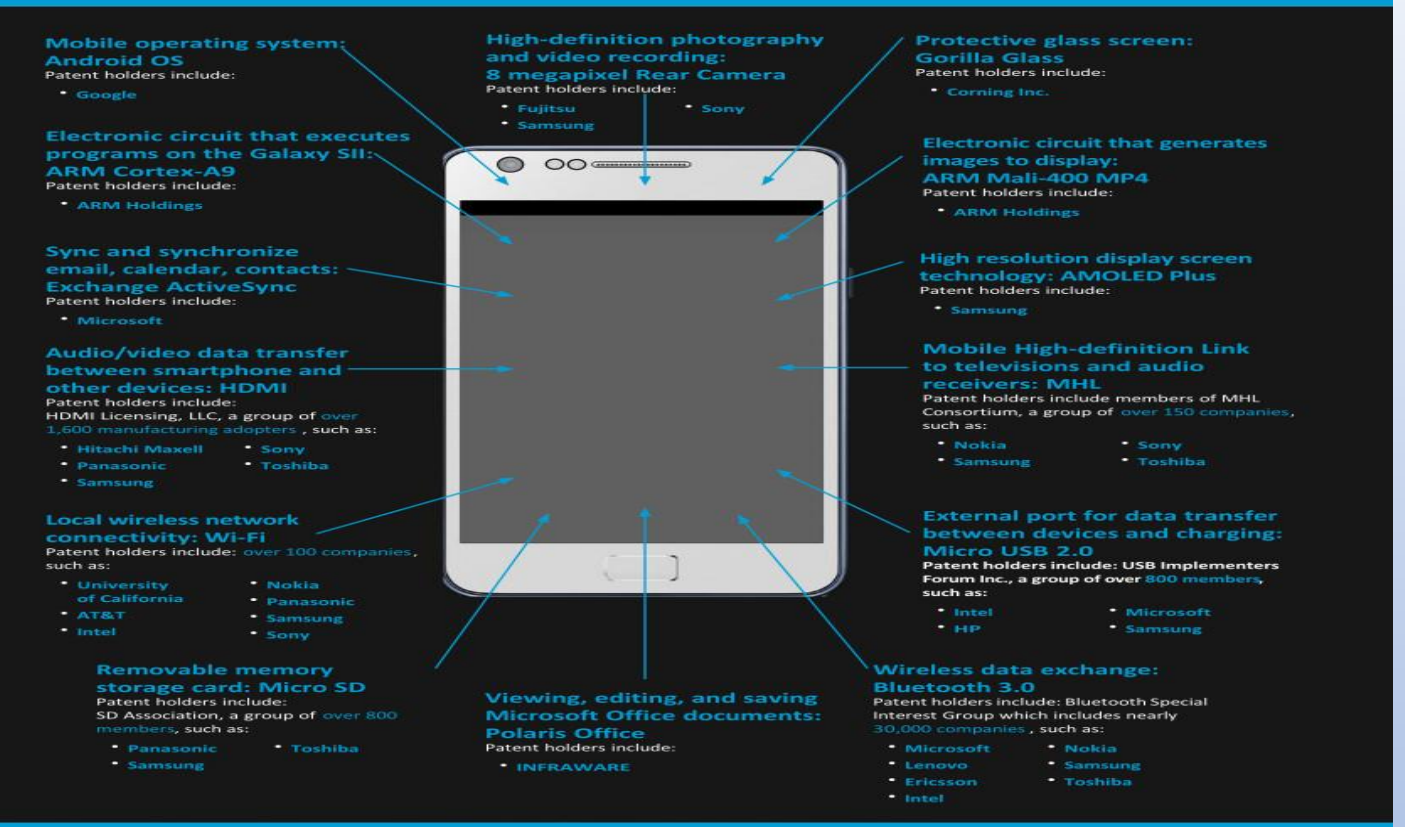
Some example market situations

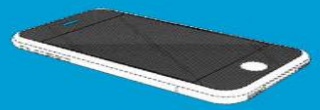
Portfolio	Requirement	Value	Situation
Single patent	Full claims chart against specific company (A or B)	High ~ $1m	Company A in litigation with Company B
Small cluster (3-5)	Full claims charted against a technology application (hot)	High ~ $1m +	New entrants into the market, behind the R&D curve. Large corp.
Small cluster (3-5)	Technical proof pack in technology application (hot)	Med ~ $500k	New start up, land grab.
Large portfolio (20+)	Related to technology application mixed	Low ~$250k+	Bulk buy, new start up or large corp to fill gap.
Single patent	Technology related	Low or no value	Strength risk
Portfolio at end of life (5 years)	Technology obsolete	Low or no value	Too late to use
Implementation portfolio	Related to technology application	Low	Alternatives

Examples of a cluster



A smartphone, like the Galaxy S2, includes hundreds of thousands of patented inventions.





US Design Patent D618,677
The ornamental design of an electronic device.

Despite the incredible amount of functional technology contained in a modern device, Apple claimed that a single functionless design is all that matters and asserted that notion for four years in court.

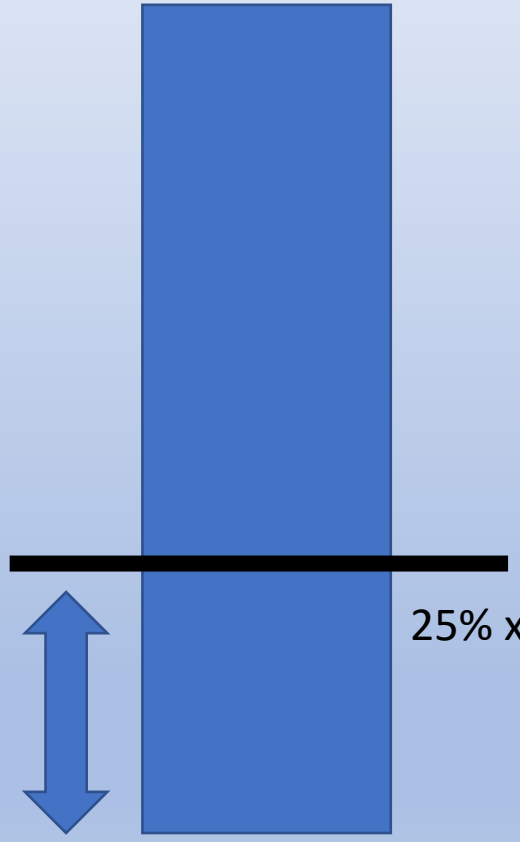
Innovators applaud the U.S. Supreme Court's December 6 decision in the *Apple v. Samsung case*.

Thank you for valuing function and form.
Let's support startups as they unleash innovation.

So How Many Patents Are in a Smartphone? — ENGINE Jan 2017

Royalty stacking

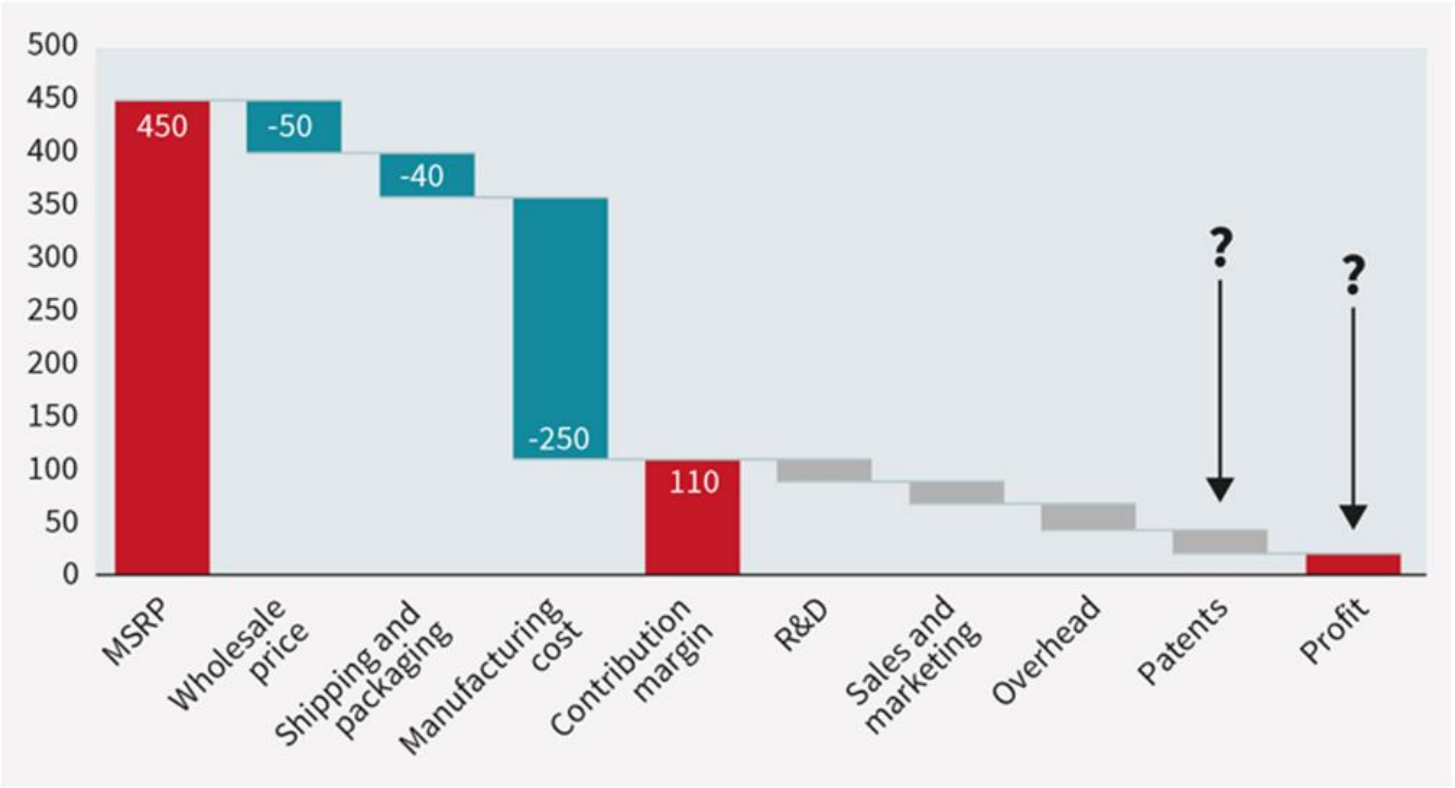
Total benefit (example Gross profit)



25% x total benefit

Shared between all patents required

Smart phone example



From IAM June 2020

Patent valuation summary

- Value is event and circumstance driven, the market is very fluid.
- The value is primarily driven by specific need, market pull not push.
- To maximise the value the patent(s) portfolio need to be matched to the market need.
- An good understanding of the market and circumstances will deliver a higher value.
- Opportunity windows are often short, transactions need to be closed quickly.
- Technology transfer packages are a method to widen the appeal and market.

Building a valuation model

- Cost based
- Benchmark
- Future income (relief from royalty)

Future income is generally used because, cost does not reflect the future value, benchmarking is hard to find as no two deals are the same.

So how do we do it? General approach.

- We have to consider some specific cases as the model inputs depend on the circumstances, however the general approach is:

1. Read the patent (s) with focus on the claims.
2. Score the patents in terms of Market, Technical and Ease of Detection (legal).
3. Cluster the patents into technology/market specific groups
4. Identify the strongest or lead patent(s) in each cluster
5. Develop technical proof packs for those suspect infringements
6. If a litigation intercept is possible, develop a legal pack

Future income model- relief from royalty

Forecast revenue productor service supported by the patents

Year	1	2	3	4	5	6	7	8	9
Sales revenue									
Net profits									
Tax									
Net profits after tax									
Royalties									

How do we work out royalties? Some thoughts

Business partnership

Licensee

How can you view the relationship

Maximising your ‘tax’ income
Licensee as the ‘enemy’
Admin function

They should pay more!
We are paying too much!
I could have done a better deal!

Let us work on the next product
Joint R&D projects
Staff exchange

Market facing retailer
Success = success!
Business function

Our licensee needs to be successful

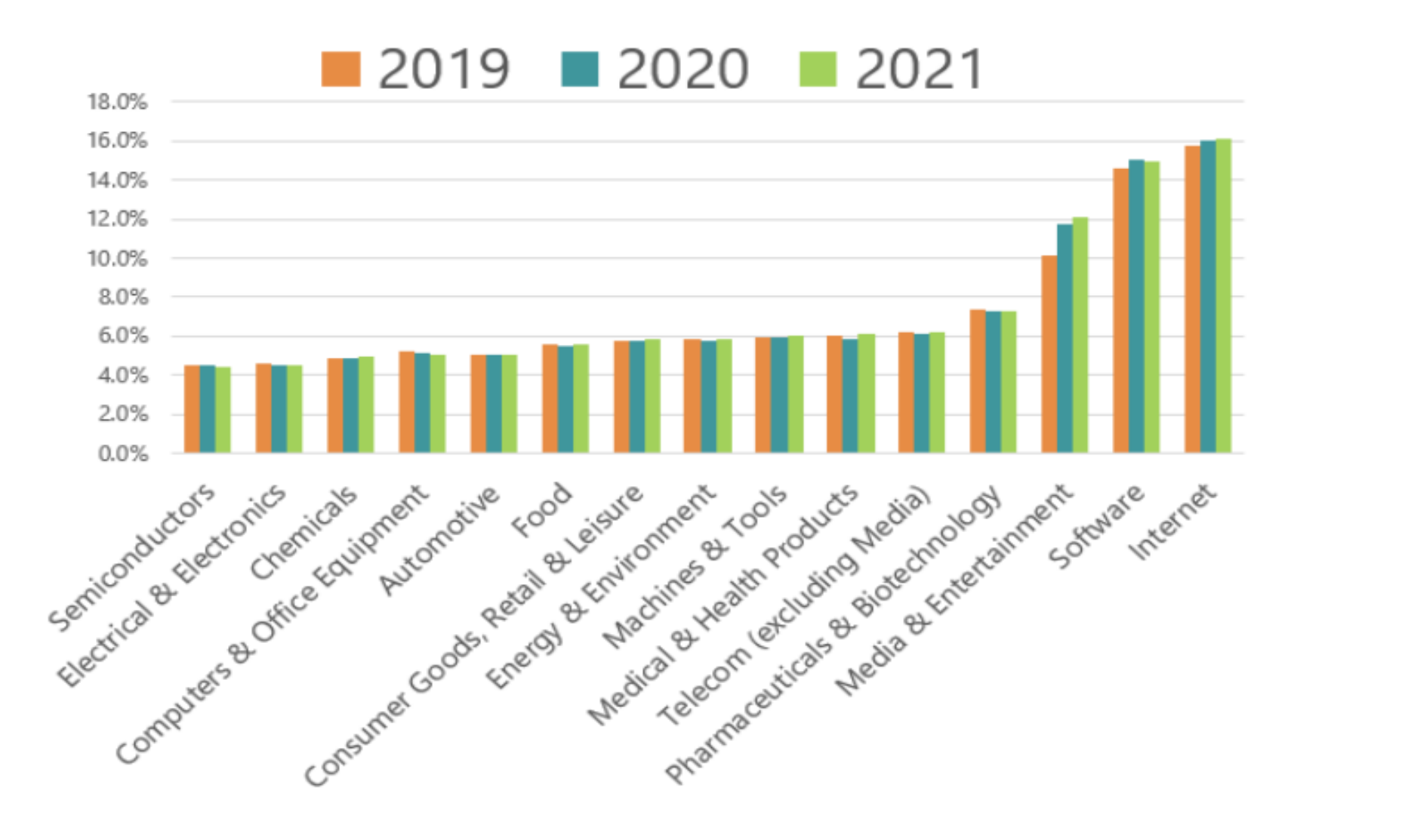
- The licensee is the channel to market for the inventions (patents).
- The licensee is investing in development and sales/marketing.
- Licensee profits = reliable royalties = win-win = happy relationship.
- As a general rule the licensor takes a maximum of 25% of the benefits, leaving 75% for the licensor (the 25% rule). However, there are a wide range of royalty options. Pick a metric that is easy to measure (audit) and manage. [$ per product, % of net/gross sales revenues, fixed payments, fixed payments with volume triggers, up-front payments, delayed payments, etc]

How do companies manage licensees?

Function	External	Relationship
Sales	General customers	Business
Procurement	Suppliers	Business
Bus Development	Large accounts	Business
Legal/finance admin	Licensees	Admin checking
Licensing dept	Licensees	Business
R&D dept	Licensees	Business

Who knows what's in the agreements 5 years after signing?
How are the terms tracked and managed.? Are they in software with reminders?

Benefit sharing – royalty rates by sector



Net profit margins by sector

Here's a table using the current 500 S&P constituents, with their historical net profit margins from 2001- 2020:

Industry	2020	2019	2018	2017	2016	2015	2014	2013	2012
Communication Services	11.3%	12.5%	10.2%	9.5%	8.9%	6.7%	5.3%	5.0%	0.8%
Consumer Discretionary	8.4%	7.9%	8.5%	9.2%	8.2%	7.6%	8.6%	7.3%	8.8%
Consumer Staples	10.2%	11.2%	13.4%	13.7%	10.3%	9.3%	11.5%	10.0%	10.1%
Energy	-0.8%	11.1%	0.6%	-19.5%	-23.7%	9.1%	10.3%	7.3%	14.1%
Financials	21.6%	20.9%	19.5%	17.7%	18.2%	17.5%	16.1%	15.9%	15.7%
Health Care	16.6%	12.2%	8.3%	10.6%	10.0%	10.2%	10.3%	9.0%	6.1%
Industrials	10.4%	11.3%	11.8%	9.7%	9.7%	9.6%	9.1%	7.9%	8.1%
Information Technology	19.1%	18.2%	12.6%	13.3%	14.1%	13.4%	15.2%	13.2%	15.7%

25% of 10% net margin = 2.5% of Net sales margin

25% of 20% net margin = 5% Net sales

Future income model- relief from royalty

Forecast revenue productor service supported by the patents

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Sales revenue									
Net profits									
Tax									
Net profits after tax									
Royalties									

Net Present Value (NPV)

Here is the DCF formula:

$$DCF = (CF/(1+r)^1) + (CF/(1+r)^2) + (CF/(1+r)^3) + \ldots + (CF/(1+r)^n)$$

Where:

CF = Cash Flow in the Period

r = the interest rate or discount rate

n = the period number

Other situations where value is modified

- Litigation, plaintiff to add weight, speed settlement. Defendant to counter or offset payments. Value is generally maximised.
- Cross licence agreements. Offset payments
- University spin out. High leverage from the University, so the transactions is often in the University favour
- New start up for investor negotiations
- An inventor or owner who does not understand the patent process or the market. Unrealistic view of value.

Summary

Value α Circumstances and Need

Anticipate high value trends (example AI)

Invent to market need

Intercept market circumstances (example litigation)