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# AI and the Patent System: Disruption or Diagnosis?

**Speakers: Alia Kahwaji, Prof. Estelle Derclaye**
**Host: Axel Ferrazzini**

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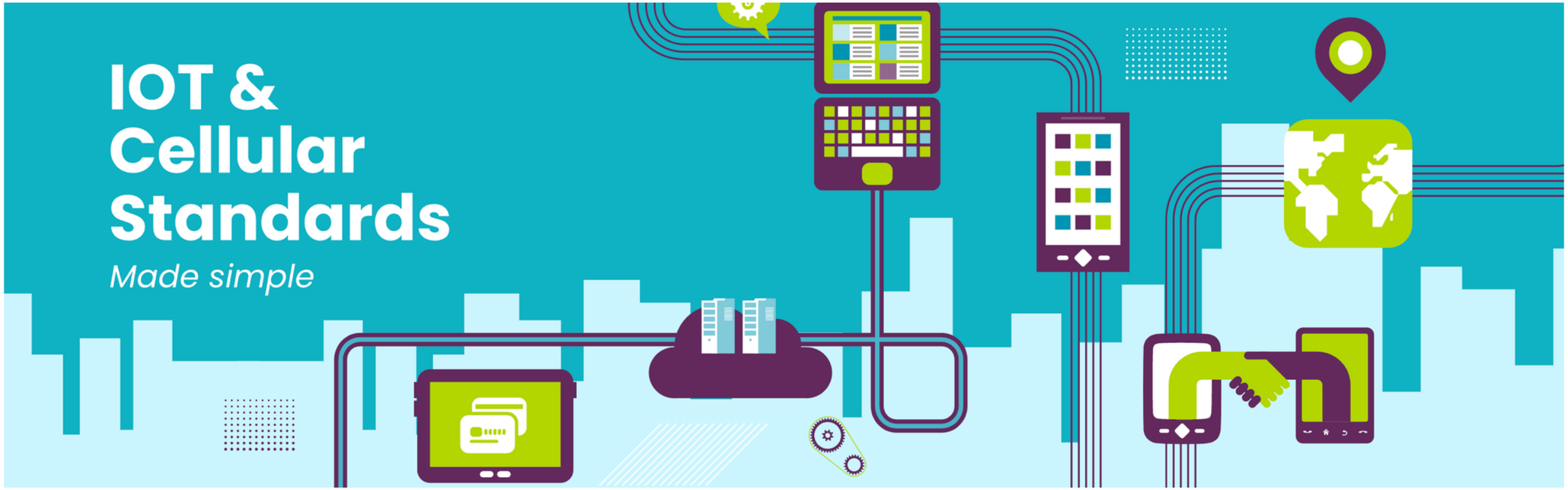


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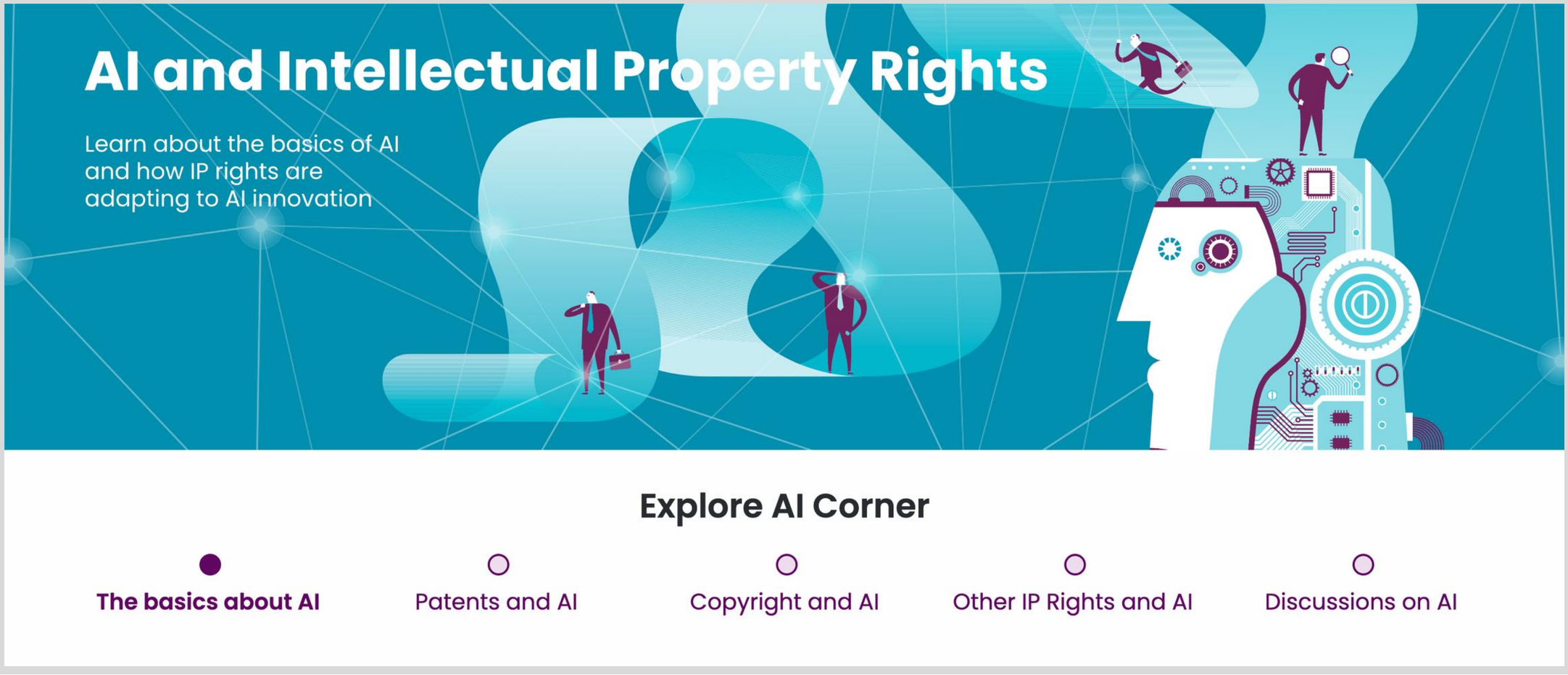

# AI and the Patent System: Disruption or Diagnosis?

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4IP COUNCIL WEBINAR

# AI and Patent Law: Disruption or Diagnosis?

*How Modern Patent Justifications Produced a Disconnected Patent System in the Age of AI*

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## Alia Kahwaji

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# Background

- A part of a wider research project on the impact of AI on the patent system and patentability criteria.
- Literature usually **addresses ad hoc cases on patentability and AI, such as the inventive step, disclosure requirement, and novelty, in silos without integrating or interrogating** the issues the system already suffers from.
- The modernistic assumptions about patent law at both the ideological and design levels are taken as given, despite **digitalisation, AI, and the changing surrounding circumstances** politically, economically and epistemologically in a postmodern age.
- **This research should be read as establishing a case for a more holistic approach and framework** to patentability reform proposals.

# AI is a Diagnosis

## This Paper Argues

- The patent system and patentability criteria should be seen as contingent responses to specific modes of knowledge production and economic organisation.
- AI is not destabilising a perfectly stable system; it reveals and exacerbates *weaknesses* already in it.

## The Diagnosis

- Patent law's modern transformations commodified and morphed the system into a techno-agnostic one,
- systematically detached from materiality and social responsibility principles, predating AI yet exacerbating its effects.

# A Genealogy of Patent Law

*The paper examines patent doctrine as an expression of political economy rather than a neutral technical system, across three socio-technical paradigms.*

1

**PRE-MODERN**

Discretionary Crown privilege, tied to qualitative, territorial utility.

2

**MODERN**

The progress ideology and patents. Techno-agnosticism and detachment from material and social contexts.

3

**POSTMODERN**

Digitalisation, the fall of the linear progress narrative, new political and economic conditions, coupled with AI-accelerated exposure of the structural vulnerabilities in the patent system.

# Pre-modernity

*Letters of Patents*

- Ad hoc royal grants (discretionary, practice-based, and politically embedded).
- Utility assessed qualitatively against tangible social and economic benefit.
- Mental labour and common good as foundational values (Aquinas).
- No linear progress ideology: history not conceived as moving toward material accumulation.
- Venetian Act 1474 and Statute of Monopolies 1624: public-interest limits introduced into patentability.
- Enlightenment thinkers planted the seeds for something different. Locke, Bacon and a utilitarian, ‘progress’-oriented approach to patent law started developing.

# The Progress Project As Ideology

- From Bacon's systematic inquiry to the Enlightenment, 'progress' assumed quasi-religious significance by the nineteenth century (Derclaye).
- Progress has two dimensions: moral and material. Patent law fixated almost exclusively on the material because of the Scientific Revolution.
- Progress is linear, inevitable, and always beneficial.

THE ROLE OF LAW changed

From **judging innovations based on how they serve society (politically/economically/practically)**

To **maximising the quantity of innovation**, leaving the market to sort value from worthlessness.

# Modernity: The Project of Abstraction

> **“The systematic removal of patent law from social, ethical, and material context.”**

- **Enabled by progress ideology.** If progress is linear, inevitable, and always beneficial, qualitative evaluation becomes unnecessary. The role of law and its design shifts accordingly.

**Spotted in four key areas of patent law policy and design.**

# The Abstraction of Patent system: Four Transformations

1 **Materiality → abstract disclosure**

Protection shifts from working artefact to the inventive concept as textual specification.

2 **Utility marginalised**

Substantive social-benefit assessment has been reduced to a minimal operability checkbox, as seen in the industrial Applicability today.

3 **Labour → object**

The inventive process disappears from evaluation; only the technical output matters.

4 **Technical formalism**

Techno-agnostic, one-size-fits-all criteria exclude ethical, social, and distributional questions.

*Together: the systematic removal of patent law from its social, ethical, and material context.*

# The Patent System Today

1. **Techno-agnostic, abstracted system.**

2. **Enabled strategic patenting and gaming.**

3. **Ignores environmental consequences and societal costs, and limits ethical assessment and intervention.**

# Postmodernity: Methodology and Condition

- Dismantling and scepticism towards mass narratives and ideologies, including the progress narrative.
- Progress is not always linear: not inevitable and not always beneficial.
- Progress can go sideways, backwards or in cyclical patterns.

***What kind of progress is being promoted through patents? (Chon)***

# Modern Assumptions Against Postmodern Reality

| Dimension | Modern Patent Law | Postmodern Reality | Implication |
|---|---|---|---|
| **Justifications** | Grand Narrative: IP = Innovation = Progress | Context-dependent; innovation ≠ benefit | Utilitarian and incentive theories are insufficient |
| **Progress Ideology** | Linear, inevitable, always forward | Cyclical, questioned, may regress | Cannot assume more patents = more welfare |
| **Innovation Subject** | Individual inventor (autonomous, rational) | Distributed networks; varied agency (human + AI + data) | 'Inventor' concept requires rethinking |
| **Knowledge Nature** | Fixed, stable, textually capturable | Networked; contextual, performative, access-sensitive | Disclosure requirements inadequate |
| **Resources** | Infinite material expansion assumed | Finite, ecologically bounded; redistribution matters | Utility cannot ignore environmental and ethical costs |
| **Value Assessment** | Market determines (efficient allocator) | Markets fail; distribution matters | Techno-agnosticism = wilful blindness |
| **Inventive Process** | Mental labour (Lockean) | Tool-mediated: algorithmic, data-driven | Inventive step / non-obviousness test requires reform |

# The AI Disruption: Harvesting What Modernity Sowed

| | | |
|---|---|---|
| 1 | **Abstraction from materiality** | **The subject-matter question.** What counts as an invention? |
| 2 | **Marginalised utility** | **AI-enabled strategic patenting.** Automated generation of technically functional but socially trivial inventions; thickets and evergreening become industrially scalable. |
| 3 | **From Labour to Object** | **The disclosure crisis.** Filings reveal nothing about AI tools in the inventive cycle, destabilising PHOSITA, prior art, and obviousness standards. |
| 4 | **Techno-agnosticism** | **The distributional issue.** Extreme asymmetries in data, compute, and platforms; patents legitimise techno-feudal concentrations of control through strategic accumulation, thickets and evergreening – enabled/facilitated by AI tools. |

CONCLUSION

# Towards postmodern patentability criteria

Patentability criteria are historically contingent on prevailing modes of knowledge production.

### Immediacy

AI is already embedded in innovation practice and demands a legal response now.

### Feasibility

Legal change is incremental: reforms to inventive step, disclosure, and utility beat wholesale reconstruction.

### Reforms potential

Even partial reforms informed by structural critique re-embed patent law in its social and ethical context.

*The solution is not abandonment, not exceptionalism – more like restoring the evaluative capacities modernity abandoned by design.*

# Q&A



Open floor for questions and discussion.

# THANK YOU!

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