

Developments in European Plant Intellectual Property

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Introduction

Plant Variety rights

Patents

Interface between the two intellectual property regimes



Plant Variety Rights



Background

Debate began in 1920s

Breeders entitled to obtain similar protection as found in other areas of technology

Plant material does not fit naturally into existing patent system



International Convention on the Protection of New Varieties of Plants (UPOV)

First Convention in 1961

Two main revisions in 1978 and 1991

Pre 1991 Convention coming into force (April 1998) –
join either 1978 or 1991 Convention

Post 1991 Convention coming into force must join 1991
Convention

1978 and 1991 acts both in operation



UPOV 1978

UPOV 1991

Limited species and genera	All species and genera
15 years with 18 years for trees and vines	20 years with 25 years for trees and vines
Authorisation required Production, Offering for sale, Marketing of reproductive vegetative material	Authorisation required Production, Conditioning, Offering for sale, Selling or marketing, Exporting/importing, Stocking
Derogation for Farm saved seed	Farm Saved Seed derogation limited
Research Exemption derogation	Research Exemption derogation plus EDV
Dual protection prohibited	Dual protection prohibition removed



UPOV Convention 1991

Strengthened breeders' rights
Protection must be provided for all species and genera
Longer duration of the right
Extension of the scope of the right
Limited farmers' privilege
Breeders' exemption
Essentially Derived Varieties
Dual protection prohibition removed



EC Plant Variety Rights

Community Plant Variety Regulation (2100/94/EC)
Based on 1991 UPOV convention
Allows EU wide plant variety protection
In 2007 - 2616 Community PVRs granted

National plant variety rights law (e.g. UK PVR Act 1997)
based on UPOV 1991 or 1978



DUS Test

Community plant variety rights shall be granted for varieties that are:

Distinct
Stable
Uniform and
New

DUS are assessed during two years of on site trials conducted by the granting office in conjunction with plant breeding institutions.

Value for cultivation and use



Derogations

Farmers' privilege

(Essentially Derived Varieties)

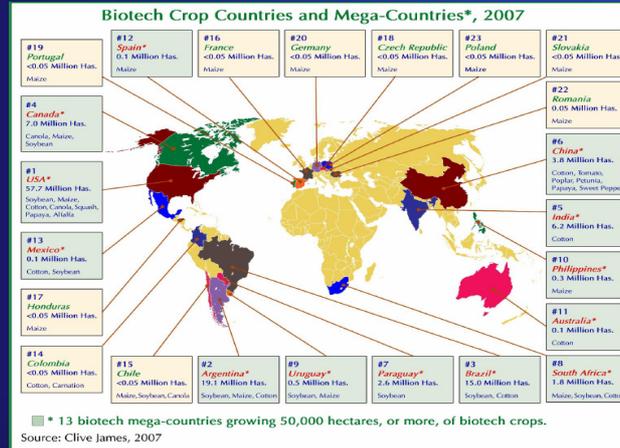
Compulsory licenses

Breeders' exemption



GM crops plantings worldwide, 2007

Biotech Crop Countries and Mega-Countries, 2007



Maize
Soybean
Cotton
Canola
Papaya
Squash
Alfalfa
Carnation
Tomato
Poplar
Petunias
Sweet pepp

Background

Increase in the importance of global trading

Extension of patent protection

Increase in involvement of companies in plant sector
with history of use of patents

GM crops

Significant change in the landscape for plant intellectual
property

Patents



Patents

Negative Right

Private Property Right

Right limited in time and space

20 years

confined to the territory of grant

Must meet certain criteria

Two sources of patent law in Europe

- European Patent Convention
- EC Directive on the Legal Protection of Biotechnological Inventions



European Patent Convention

EPC came into force 1973

Not body of the EU though all EU member states are members EPC

Protection once granted extends to as many countries as applicant designates

Granted by EPO - Enforced at national level



Granting Criteria

Novel

Inventive Step

Capable of Industrial Application

Not Excluded



Granting Criteria

Novelty

- Material which does not form part of the state of the art is deemed to be novel (Article 54)

Inventive Step

- It must not have been obvious to invent (Article 56).

Industrial Application

- An invention shall be considered as susceptible of industrial application if it can be made or used in any kind of industry, including agriculture (Article 57)



Excluded Material

Article 53(b) EPC

Plant and animal varieties and essentially biological process for the production of plants and animals - this does not extend to microbiological processes or the products thereof



Directive on the Legal Protection of Biotechnological Inventions

Article 4 - Biotech Directive

1. The following shall not be patentable:

- (a) plant and animal varieties;
- (b) essentially biological processes for the production of plants or animals

2. Inventions which concern plants or animals shall be patentable if the technical feasibility of the invention is not confined to a particular *plant or animal variety*.

Plant varieties are defined according to the Community Plant Variety Rights Regulation (Article 2(3))

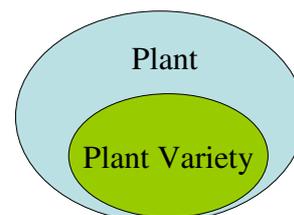


'Novartis' Ruling

The 'Novartis' case permits the patenting of plants in Europe provided a *technical invention* can be shown and plant varieties are not claimed specifically

A claim wherein specific plant varieties are not individually claimed is not excluded from patentability under Article 53(b), EPC even though it may embrace plant varieties.

Subject matter of a claim and the scope of a claim are two different issues



Derogations – Biotech Directive

Unlike the EPC the Directive specifically permits certain derogations.

Farm Saved Seed

Compulsory and compulsory cross licensing

Not mentioned

Research (breeders') exemption
(Essentially Derived Varieties)



Co-existence of Plant Variety Rights and Patents



Farmers' Privilege

Farm Saved Seed

- Found in Community and UK PVRs
- Implemented from Directive into UK Patents Act

Farm Saved Seed will apply equally to PVR protected or patent protected plants.



Compulsory and compulsory cross licenses

In Directive

- constitutes significant technical progress of considerable economic interest

In PVR legislation formerly only issued if in public interest

CPVR Regulations changes in 2004 to match that found in Directive

Balance still in favour of patents (no CL for patents until 3 years after grant)



Breeders' / Research exemption

PVRs

- the right to use protected material freely for research purposes provided that the
 - acts are done for the purpose of breeding or discovering and developing varieties

Patents

- The determining factor is whether the material is being used with a commercial objective in mind. If so then it is unlikely to fall within the research exemption
- Research on or with the invention



Essentially Derived Varieties

EDV - variety is classified as an EDV "when it is predominantly derived from the initial variety"

Introduced to

- Address issue of small incremental changes
- Address imbalance between patents and PVRs



Scope of Claim

Scope of Claim

- plant variety rights the scope of protection is fixed by national / regional legislation
- Patents the scope of the claim is determined by the claims in the patent
- Often in interest of patent holder to make broad claims



Thoughts

Overlap between two intellectual property regimes
Rights of the holder of PVRs and patents getting more comparable
Still certain fundamental differences
Future PVRs uncertain – increased importance IPRs
Practise overcome perceived problems



