

Patents on Seeds and Animals, on Eggs & Bacon, Tomatoes and Melons

EP.1.069.819

Plant Bioscience



September 2012

Dr. Christoph Then

www.no-patents-on-seeds.org
Info@no-patents-on-seeds.org

no patents on seeds

Home

Recent Activities

Open letter To Members of the European Parliament and European Commission

[Sign now!](#)

Information

News

Patent Cases

Background

Newsletter

About Us

Contact us

Imprint

About no patents on seeds

Archive

The Global Appeal

ALERT against Monsantoizing

Photos

Stop patents on plants and animals!

The organisations behind No Patents On Seeds are especially concerned about increasing number of patents on plants, seeds and farm animals and their impact on farmers, breeders, innovation and biodiversity. These patents create new dependencies for farmers, breeders, food producers and consumers. These patents have to be regarded as misappropriation of basic resources in farm and food production and as general abuse of patent law. We call for an urgent re-think of European patent law in biotechnology and plant breeding and to support clear regulations that exclude from patentability processes for breeding, genetic material, plants and animals and food derived thereof.

Opposition to Monsanto's Patent on Indian Melon

3. February 2011. New Delhi/ Munich. The renowned Indian activist Vandana Shiva and the European NGO-platform "No Patents on Seeds" joined forces today to file an opposition against European Patent EP1962578. This patent claims melons with a natural resistance to certain plant viruses originating in India. The patent was granted in May 2011 as an invention to the US company Monsanto by the European Patent Office (EPO) in Munich, Germany. Critics point out that the patent was granted even though European Patent Law does not allow patents on conventional breeding. Furthermore, the reasons for the opposition also include the issue of biopiracy, which is why Vandana Shiva and her organisation Navdanya from India are engaged in this opposition.

[* Read more](#)

Patent on tomato becomes a landmark decision

Patent on tomato becomes a landmark decision
Call for better control of EPO

Munich, 8 November 2011. Today the European Patent Office (EPO) decided to forward the patent on tomatoes (EP1211926) to the Enlarged Board of Appeal. In doing so the EPO surprisingly followed calls by critics who fundamentally oppose patents on plants and animals. This decision questions the office's current practice of granting patents on plants and animal derived through traditional breeding methods. The Enlarged Board of Appeal is the EPO's highest



Initiators



Berne Declaration
Déclaration de Bernes
Ekiikõuna von Bern



UTVIKLINGSFONDET
THE DEVELOPMENT FUND - FOR FINNISH SWEDISH



granted patents in Europe till end of 2010



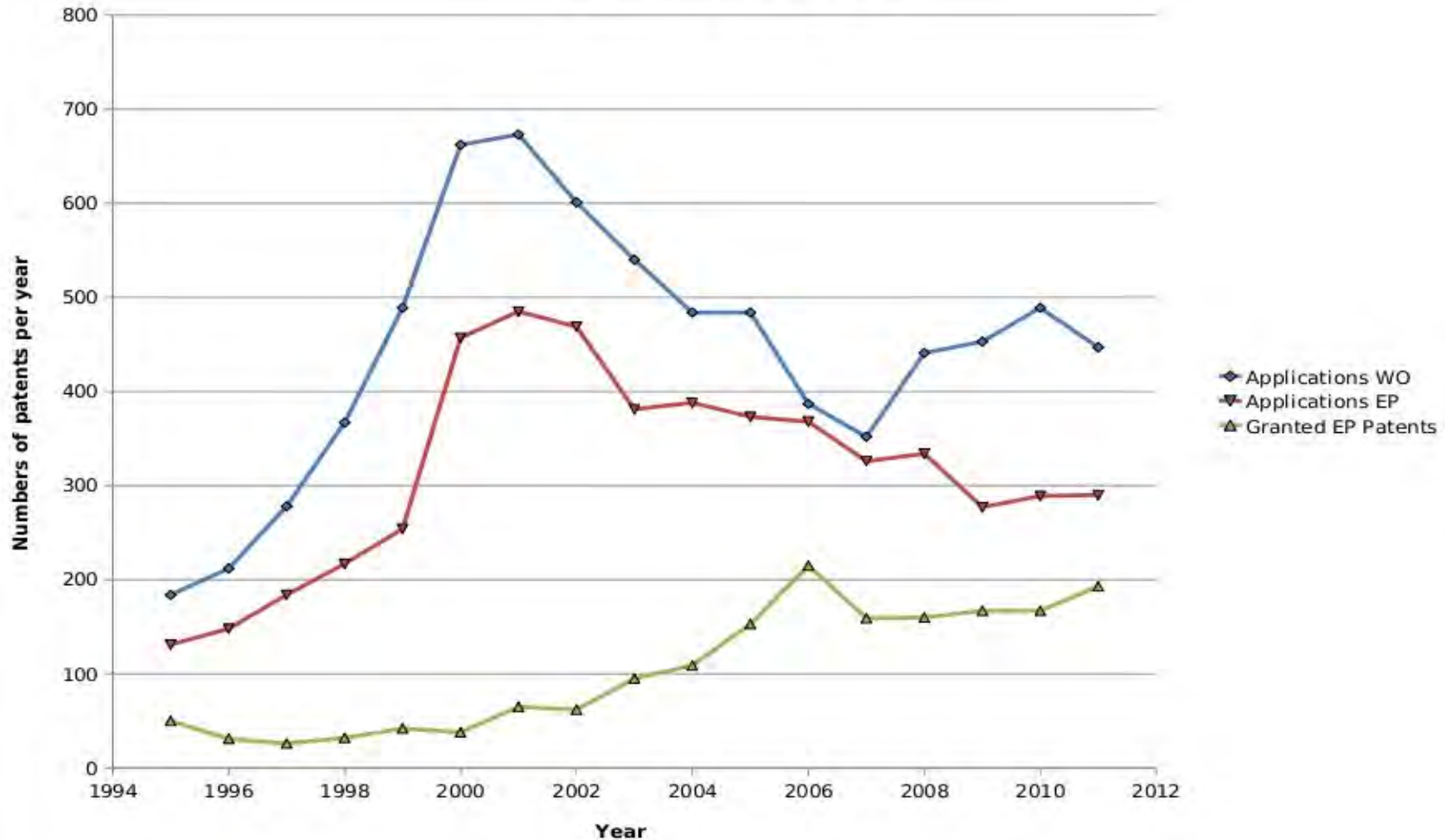
Granted:

- Gene sequences humans / animals 3.700
- Animals 1.100
- Plants 1.800

European patent applications on plants



Patents on Plants



the Roundup Ready case, EP 546090



(19)

Europäisches Patentamt

European Patent Office

Office européen des brevets



(11)

EP 0 546 090 B1

(12)

EUROPEAN PATENT SPECIFICATION

(45) Date of publication and mention
of the grant of the patent:
19.06.1996 Bulletin 1996/25

(51) Int Cl.⁶ C12N 15/54, C12N 15/82,
C12N 5/10, A01H 5/00

(21) Application number: 91917090.2

(86) International application number:
PCT/US91/06148

(22) Date of filing: 28.08.1991

(87) International publication number:
WO 92/04449 (19.03.1992 Gazette 1992/07)

(54) GLYPHOSATE TOLERANT 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE SYNTHASES
GLYPHOSATTOLERANTE 5-ENOLPYRUVYL-3-PHOSPHOSHIKIMAT-SYNTHASEN
SYNTHASES DE 5-ENOLPYRUVYLSHIKIMATE-3-PHOSPHATE TOLERANT LE GLYPHOSATE

the Roundup Ready case, EP 546090

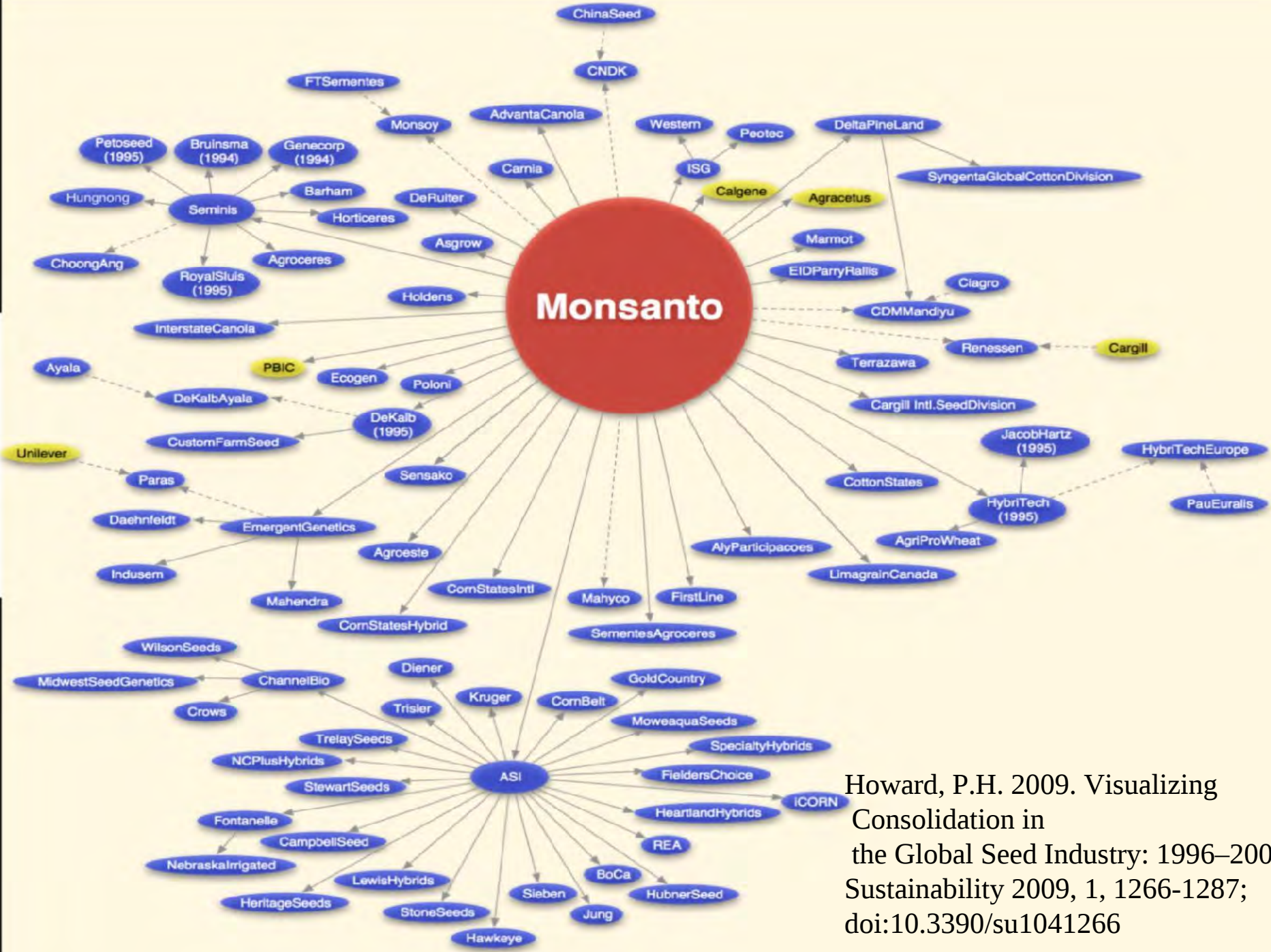


- Claim 28: “A glyphosate tolerant **plant** .. Selected from the group consisting of corn, wheat, rice, soybean, cotton, sugarbeet, oilseed rape, canola, flax, sunflower, potato, tobacco, tomato, alfalfa, poplar, pine, apple and grape.”
- Claim 29: “A method for selectively controlling weeds in a field containing a crop [...] **planting** said crop seeds [...] and applying to said crop and weeds in said field a sufficient amount of [...] herbicide“

the Roundup Ready case, EP 546090



- Claim 1: “An **isolated DNA sequence** encoding a Class II EPSPS enzyme [...]“
- Claim 14: “A **method of producing** genetically transformed plants which are tolerant toward glyphosate herbicide [...]“
- Claim 20: “A glyphosate tolerant **plant cell** [...]“

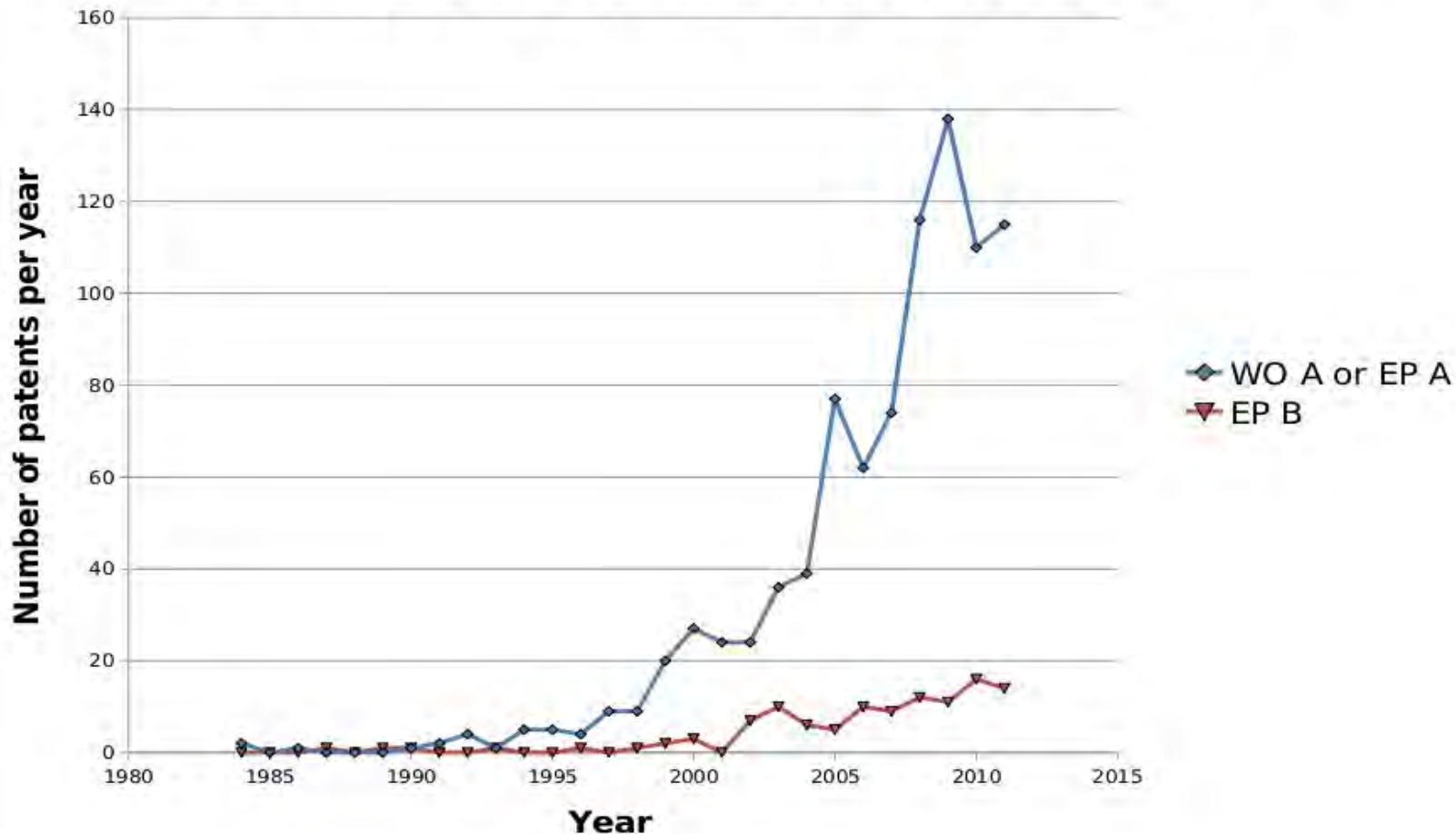


Howard, P.H. 2009. Visualizing Consolidation in the Global Seed Industry: 1996–2008. Sustainability 2009, 1, 1266-1287; doi:10.3390/su1041266

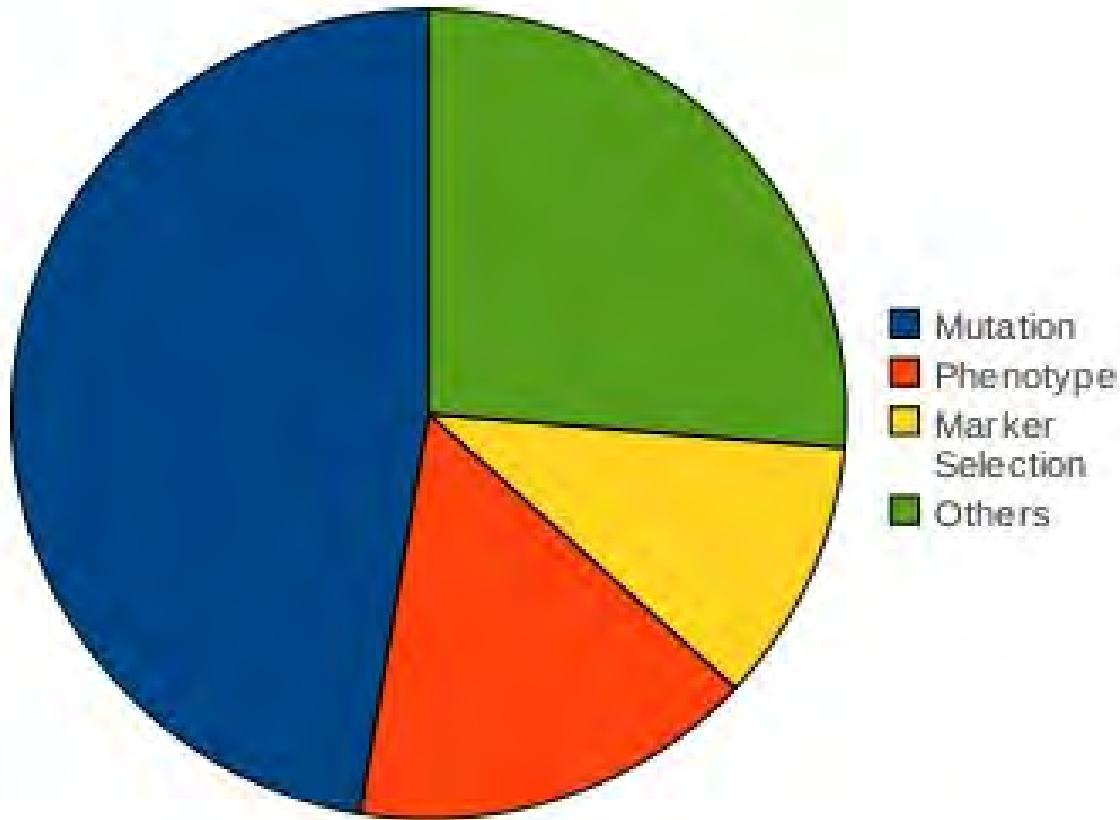
EPO/ WIPO: patent applications covering conventional breeding



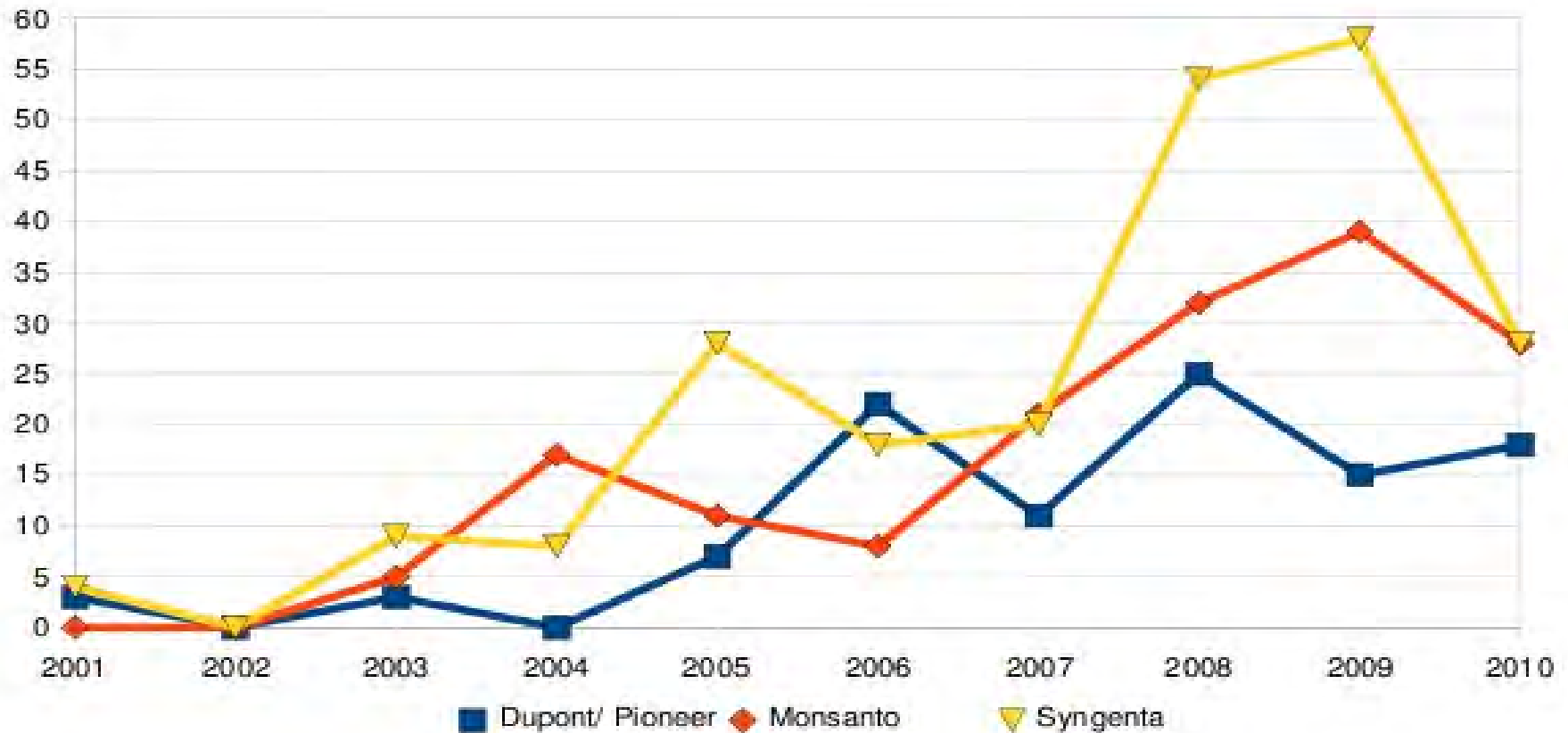
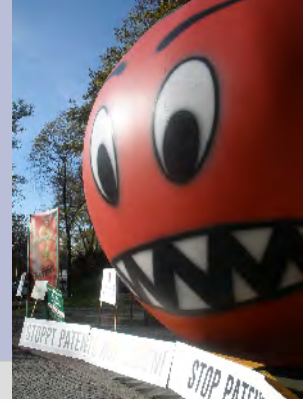
Patents on "Plants no GE" 1984 - 2011



EPO: categories of 'inventions' in conventional breeding




Patent applications on conventional breeding : Dupont, Monsanto, Syngenta



% of their plant patent applications

Broccoli: the precedent case



(19)  **Europäisches Patentamt**
European Patent Office
Office européen des brevets



(11) **EP 1 069 819 B1**

(12) **EUROPEAN PATENT SPECIFICATION**

(45) Date of publication and mention
of the grant of the patent:
24.07.2002 Bulletin 2002/30

(51) Int.Cl.7: **A01H 5/10**

(21) Application number: **99915886.8**

(86) International application number
PCT/GB99/01079

(22) Date of filing: **08.04.1999**

(87) International publication number:
WO 99/52345 (21.10.1999 Gazette 1999/42)

(54) **METHOD FOR SELECTIVE INCREASE OF THE ANTICARCINOGENIC GLUCOSINOLATES IN BRASSICA SPECIES**

VERFAHREN ZUR SELEKTIVEN ERHÖHUNG DES ANTICARCINOGENEN GLUCOSINOLATE BEI BRASSICA SORTEN

PROCEDE PAR SELECTION D'ACCROISSEMENT DES GLUCOSINOLATES ANTICARCINOGENES DE LA BRASSICA

(84) Designated Contracting States:
**AT BE CH CY DE DK ES FI GB GR IE LI LU MC
NL PT SE**
Designated Extension States:
AL LT LV MK RO SI

(56) References cited:

- MITHEN, R.F. ET AL: "Glucosinolates of wild and cultivated brassica species" **PHYTOCHEMISTRY**, vol. 26, no. 7, 1987, pages 1969-1973, XP002110359 cited in the application
- CARLSON, D.G. ET AL: "Glucosinolates in Crucifer Vegetables: Broccoli, Brussels Sprouts, Cauliflower, Collards, Kale, Mustard Greens and Kohlrabi" **JOURNAL OF THE AMERICAN SOCIETY OF HORTICULTURAL SCIENCE**, vol. 112, no. 1, 1987, pages 173-178, XP002110360 cited in the application
- FAHEY J W ET AL: "Broccoli sprouts: an exceptionally rich source of inducers of

(30) Priority: **09.04.1998 US 81169 P**

(43) Date of publication of application:
24.01.2001 Bulletin 2001/04

(73) Proprietor: **Plant Bioscience Limited**
Norwich, Norfolk NR4 7UH (GB)

Broccoli: the precedent case (G2/07)



1. A method for the **production** of Brassica oleracea with elevated levels of (...) glucosinolates (...) which comprises:
 - (a) **crossing** wild Brassica oleracea species with Brassica oleracea breeding lines; and,
 - (b) **selecting** hybrids with levels (...) glucosinolates (...), elevated above that initially found in Brassica oleracea breeding lines.

Broccoli: the precedent case (G2/07)



9. An edible Brassica **plant** produced according to the method (...)
10. An **edible portion** of a broccoli plant produced according to the method (...)
11. **Seed** of a broccoli plant produced according to the method (...)



Semi Dried Cherry Tomatoes

NATURALLY DRIED
HIGH LYCOPENE
NO PRESERVATIVES ADDED
SUPERIOR TASTE

FREE SAMPLE

**Tomato: the second
precedent case
(G1/08)**

**Reduced water
content**

WO. 2009 / 097403

Monsanto



PATENTED

?

**Upcoming:
from feed to meat**



Monsanto patent applications on meat and fish

- WO2009097403
- Claim 1: “a pork product for human consumption ...”
- Claim 18: “(...) consisting of bacon, ham, pork loin, pork ribs, pork steaks (...)
- Claim 34: “A method of producing pigs comprising: a) providing a nutritious composition (...), b) feeding said nutritious composition to at least one pig; and c) producing progeny from said at least one pig ...”
- WO201027788: similar claims in aquaculture



What was decided at the EPO (G1/08)

1. A non-microbiological process for the production of plants which contains or consists of the **steps of sexually crossing** the whole genomes of plants and of **subsequently selecting** plants is in principle excluded from patentability as being "essentially biological" within the meaning of Article 53(b) EPC.
2. Such a process **does not escape the exclusion** of Article 53(b) EPC merely because it contains, as a further step or as part of any of the steps of crossing and selection, a step of a technical nature which serves to enable or assist the performance of the steps of sexually crossing the whole genomes of plants or of subsequently selecting plants.

What was not decided at the EPO (G1/08) ?



- >> Patentability of products (not only processes)
- >> Processes for selection or asexual propagation
- >> Breeding methods like mutational breeding



What will be decided in the follow up of G1/08?

T 1242/06

Headnote:

The following questions are referred to the Enlarged Board of Appeal for decision:

1. Can the exclusion of essentially biological processes for the production of plants in Article 53(b) EPC have a negative effect on the allowability of a product claim directed to plants or plant material such as a fruit?

The EU Unitary Patent and the breeders exemption – discussion in parliament



Proposal Mr. Rapkay:

„The use of biological material for the purpose of breeding, discovering and developing any new plant variety.“

Proposal Green Party:

„The use of the biological material for the purpose of plant and animal breeding, discovering and developing new varieties and their commercialisation.“

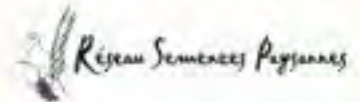
no patents on seeds

The coalition of 'no patents on seeds' is demanding:

No patents on

- Plants and animals
- Process for breeding plants and animals
- Gene sequences from plants and animals
- Food derived from plants and animals

www.no-patents-on-seeds.org



STOPPT PATENTE AUF LEBEN!

Keine Patente
auf Leben!

