

Gene Patenting

Pre-Reading

A. Warm-Up Questions

1. What does a biotechnology company do?
Have you heard of Monsanto?
If so, what do you know about this company?
2. What are genes? Have you heard of genetically modified food or genetically modified organisms (GMOs)? If not, can you guess the meaning of these?
3. What do modern-day farmers do to protect their plants from insects and weeds?
4. What does it mean to sue someone in a court of law?
5. If a company invents something, what can it do to protect this invention and prevent others from stealing this idea?
6. Explain the meaning of the following expressions: *by accident* and *on purpose*.



B. Vocabulary Preview

Match the words on the left with the correct meanings on the right.

- | | |
|---------------------|--|
| _____ 1. contain | a) to put inside |
| _____ 2. herbicide | b) to legally protect one's invention |
| _____ 3. damage | c) to break a law or agreement |
| _____ 4. previous | d) to come from |
| _____ 5. recover | e) to hold within itself |
| _____ 6. research | f) to hurt, to injure, to cause destruction |
| _____ 7. insert | g) to take to court and ask to be paid for suffering |
| _____ 8. profit | h) a chemical used to kill harmful weeds and plants |
| _____ 9. patent | i) to get back |
| _____ 10. originate | j) gain, money earned |
| _____ 11. violate | k) from before |
| _____ 12. sue | l) to study |

Reading

1. Monsanto Canada, a biotechnology company, produces canola seed that **contains** a gene that protects the seed from the effects of Roundup, a weed killer also produced by Monsanto. Farmers who buy and plant Roundup Ready canola seed can use the **herbicide** to kill the weeds in their fields without **damaging** their canola crop. They must agree to buy new seed every year instead of saving seeds from **previous** crops to plant new ones. Monsanto argues this is the only way to **recover** the money it spends on **researching** and developing genetically improved seeds.
2. In the late 1990s, Monsanto **sued** Saskatchewan farmer Percy Schmeiser for growing Roundup Ready canola without having bought the seed. Schmeiser said the seeds had blown into his field by accident, either from his neighbors' fields or off passing farm equipment.
3. Lower courts ruled against Schmeiser's "by accident" argument and ordered him to turn over the **profits** from his 1998 crop to Monsanto. He then took his fight to the Supreme Court of Canada to argue that a company should not be allowed to **patent**, or control, the use of a plant.
4. In May 2004, the Supreme Court ruled that Monsanto could not patent a plant, but it could patent the gene that it had developed and the process for **inserting** it into the seeds. It means that farmers who do not buy seed directly from Monsanto each year have to remove any crop from their land that **originated** from Monsanto seed, no matter how it got there.
5. Earlier, in 2003, a government biotechnology advisory council had recommended that, in some cases, higher life-forms such as plants could be patented, that farmers should have a limited right to save and use seeds from patented plants, and that those who accidentally **violate** patents should have some legal protection.
6. Given the Supreme Court's decision and the committee's recommendations, the Federal Patent Act needs to be updated to make the rules for gene patenting clearer.

"Can you imagine if a person decided to paint their house purple on a windy day, and as they're spraying their purple paint, it's blowing all over their next-door neighbor's white house? But instead of having to pay the neighbor for ruining their house, the guy with the purple house sues his neighbor for taking some of his purple paint."

—Jim Gerritsen, seed grower

Comprehension

Discuss these questions in pairs, and write the answers in your notebook.

1. What is Roundup?
2. What is Roundup Ready canola seed?
3. Why does Monsanto make farmers agree to buy new seeds every year instead of letting them use seeds from previous years?
4. Why did Monsanto sue farmer Percy Schmeiser?
5. What did Percy Schmeiser argue in the Supreme Court of Canada?

Vocabulary Review

Complete the sentences using a word from the vocabulary list on page 1. You may need to change the word form.

1. You promised to pay your ex-wife \$1000 every month.
If you _____ the divorce agreement, you will have to go back to court.
2. His business is only two years old, but he is already making a huge _____.
3. You have to _____ a quarter into the parking meter to park for one hour.
4. He is going to the library to do some _____ for his university project.
5. If you don't wear your reading glasses, you will _____ your eyesight.

Discuss

Work with a partner or in small groups. Discuss the following questions.

1. Do you believe Percy Schmeiser's argument that the canola seeds had blown onto his land by accident?
2. Did Percy Schmeiser win or lose his court case?
Do you agree with the court's decision? Why or why not?
3. The article mentioned three recommendations that the Canadian government's biotechnology advisory council made in 2003. Do you support these recommendations?
4. Does the 2004 decision made by the Supreme Court support or contradict the recommendations of the advisory council?
Explain your answer.
5. What do you think about genetically modified food? Discuss the advantages and disadvantages of genetically modified food. Do you think that all genetically modified foods should be labeled as such?

Debate

Below are two topics to debate in small groups or pairs.
Your teacher will tell you if you will be debating for or against the idea.
You will have ten minutes to prepare your arguments.

TOPIC #1

A company should not be allowed
to patent or control the use of a plant.

TOPIC #2

Biotechnology companies like Monsanto will
help solve the problem of world hunger with
their genetically modified plants and foods.

Writing

Choose one of the questions from the Discuss section above.
Then write a paragraph in your notebook stating your own opinion.

Useful Expressions and Transitions for Debating

Agreeing and Disagreeing

- That doesn't take away from the fact that...
- That's beside the point.
- With all due respect...
- I agree with you there.
- I agree with ---- (name).
- I see your point, but...
- That may be true, but...
- We're going to have to agree to disagree.
- I get/see where you're coming from, but...
- I'm afraid I disagree entirely.
- I'm afraid I'd have to disagree.
- I agree to some extent, but...
- I disagree with you there.
- Pardon me for disagreeing, but...

Interrupting / Asking to Contribute

- I hate to interrupt, but...
- If I may come in here...
- I'd like to add something.
- Would you like to contribute something?
- I'd like to raise a point.
- If I could speak for a moment...
- I'd like to cut in here.
- You haven't answered my question.

Persuading

- Can you see where I'm coming from?
- I challenge you to give this a try/chance.
- I want you to see it my way.
- Put yourself in my shoes.
- Am I getting through to you?

Expressing an Opinion

- In my honest opinion...
- It is my belief that...
- From my experience...
- From where I look at it...
- From my point of view...

Clarifying / Rephrasing

- Let's be clear here...
- I think you misunderstood what I said.
- What I said was... (repeat a point that was misunderstood or confused)
- What I meant to say was... (rephrase something in a way that is clearer)
- In other words...
- What I was trying to say before I was interrupted is that...

Summarizing / Concluding

- So let me get this straight. You think...
- To conclude...
- I'd just like to summarize by saying...
- Finally, I'd like to reiterate that...
- It's time to take stock of what we've heard today.
- Both sides have some valid points.
- The stronger argument/team today is...