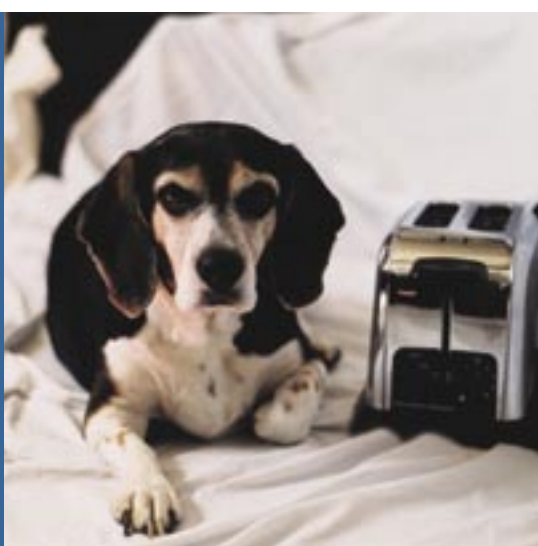


ALLOW ME  
TO STATE  
THE OBVIOUS:  
DOGS ARE  
**NOT**  
TOASTERS

By Crystal Schaeffer,  
AAVS Outreach Director

It is certain that those who originally established the agency could never have imagined that it would be issuing patents on animals.

**On February 25, 2004, the American Anti-Vivisection Society (AAVS) along with PatentWatch Project of the International Center for Technology Assessment, a non-profit organization dedicated to ending exploitative and unethical practices in the technology industries, announced and submitted their Request for Re-Examination of United States Patent No. 6,444,872, immuno-suppressed beagles who are infected with a deadly fungal infection. The patent includes the methods used to acquire the animals and to make them sick, as well as the sickened beagles themselves.**



### BRINGING IN THE ANIMALS

Until 1980, the USPTO had prohibited the patenting of living organisms, since they were considered “products of nature” and thus not patentable. This principle was challenged when the U.S. Supreme Court considered an appeal of a denied patent application for an oil-eating bacterium. By a margin of five to four, the Court ruled that the “relevant distinction is not between living and inanimate things, but whether living products could be seen as ‘human-made inventions.’”

Some years later, after deeming that genetically modified oysters could be considered patentable ‘subject matter,’ the USPTO announced in 1987 that it “now considers nonnaturally occurring, nonhuman, multicellular living organisms, including animals, to be patentable subject matter.” The first patent on an animal was issued to Harvard University in 1988 when the ‘Oncomouse,’ a patent for genetically manipulated mice who are predisposed to develop cancer, was approved. Since then, several major universities, government agencies, and corporations, both domestic and abroad, have patented animals in the U.S. and enjoyed significant financial gains. And experimenters at the University of Texas, as well as Sandra Technology, Inc. which has licensed the patent, are also in line to enjoy financial rewards using the beagle patent.

### PATENT No. 6,444,872: BEAGLES

In 1999, researchers at the University of Texas ‘successfully’ rendered 31 healthy

beagles immuno-compromised in order to ‘mimic’ humans with weakened immune systems brought about through ailments such as AIDS, chemotherapy, or transplant surgeries, making them susceptible to fungal infections in their lungs. In order to induce damage to their immune systems, the experimenters administered daily doses of steroids and subjected the dogs to various levels of total body irradiation. After several weeks of this regimen, the beagles who survived were infected with *Aspergillus fumigatus*, a mold that is most commonly present in infections in patients with hematological cancers such as leukemia and Hodgkin’s disease, by inserting a pediatric bronchoscope down their throats, allowing experimenters to localize an infection in one lung.

In 2002, the University of Texas experimenters obtained a patent for this impaired beagle ‘model,’ which they consider a “testing vehicle” for various treatments in the future, as well as a ‘model’ through which they claim they can learn more about the pathophysiology of systematic fungal infections. In granting the patent, the USPTO judged that the sick beagles were “manufactures” or “compositions of matter,” and that the process to ‘produce’ them was “nonobvious.”

However, it is questionable as to whether or not the methods performed to obtain the beagles and infect them would be nonobvious to those working in the biomedical field. It is certain that the beagles suffer as their immune systems are decimated, making them weak and depressed; that they feel discomfort and pain as a result of the lung infection, which can cause labored breathing; and their misery continues as they are used in drug testing experiments until they are killed and their bodies are dissected to examine the effects of trial drugs or the lack of treatment in the control animals. ▶

For over 200 years, the U.S. Patent and Trademark Office (USPTO) has issued patents—exclusive property rights—to inventors of “any new and useful process, machine, manufacture, or composition of matter...” To be considered for a patent, the designer must prove that his/her invention is “...sufficiently different from what has been used or described before that it may be said to be *nonobvious* to a person having ordinary skill in the area of technology related to the invention.” There is little doubt that the original intent of the U.S. Patent Office was (and continues to be) to protect inventors as well as their discoveries, and it is certain that those who originally established the agency could never have imagined that it would be issuing patents on animals. However, to date the USPTO has granted over 460 patents on animals.

PHOTO: LAUREN ZAPRALA

## ► REQUEST FOR RE-EXAMINATION

In seeking to get the beagle patent rescinded, AAVS and PatentWatch submitted a Request for Re-Examination to the U.S. Patent and Trademark Office. This formal petition is based on the grounds that animals should not be patented like inanimate objects and that the patentees have not fulfilled the nonobvious requirement of the USPTO.

In claiming that their methodologies are nonobvious, the ‘inventors’ contradict themselves in several areas, including in the methods of rendering the beagles immuno-compromised. The researchers themselves note in their patent request that there are several ways to accomplish this, stating that “...other methods of immuno-suppression are known in the art and may be employed to immuno-suppress animals.” In fact, the researchers go on to cite other methods to immuno-compromise an animal, such as radiation alone, drugs alone, or various combinations of the two. Such statements nullify their claims that the method used to suppress the beagles’ immune systems is nonobvious and thus not worthy of being patented.

The patentees also claim that their utilization of a beagle is nonobvious. However, beagles are commonly used in experimentation, including radiation research, because of their “convenient size” and “good disposition,” as a citation in the Request for Re-Examination states.

The Request also cites outside researchers and quotes from the literature that “beagle dogs have been utilized extensively in biomedical research...[and in] radiation studies.” The fact that it is widely known within the research industry that beagles are often used in experimentation thus voids the patentees claims of non-obviousness.

Furthermore, as noted in the Request for Re-Examination, the literature states that there are a number of different methodologies by which to infect beagles with a mold and study the results of such infections. These differences encompass at what point the infection is actually made (i.e. the mode to define immuno-suppression) and the method used to suppress the beagles’ immune systems, which is not defined in any limiting fashion in the beagle patent. The Request also challenges the nonobviousness of analyzing the results and

compiling useful information, stating, “...it would have been obvious to the person of ordinary skill in the art at the time the ‘invention’ was made to have administered an antifungal agent to the...infected dog” and then measure and compare “symptoms of fungal infection in a dog treated with that agent with the symptoms of a dog not treated with that agent....”



PHOTO: LAUREN ZAPRALA

The Request for Re-Examination also questions the patentees’ use of animals, stating “that [a] person of ordinary skill in the art would reasonably *doubt* that the claimed beagle dog, as a whole, is a ‘machine,’ ‘manufacture,’ or ‘composition of matter.’” In other words, dogs (or any animals) are not inanimate objects and, therefore, do not fit the criteria of patentable subject ‘matter,’ which is defined in the literature as “any new and useful art, process, machine, manufacture, or composition of matter, or any new and useful improvement in any art, process, machine, manufacture, or composition of matter.”

Last year, the Supreme Court of Canada also questioned whether animals should be patented in a 5-4 ruling against Harvard University’s Oncomouse, declaring that

mice and other ‘higher’ animals could not be patented according to Canadian laws, which feature similar definitions to those in the U.S. Furthermore, a preliminary examination by the European Patent Office of an application to establish the beagle patent in Europe failed to find “inventive activity” in the patent and questioned “whether the claimed treatment of beagle dogs is con-

trary to public order or morality....”

Additionally, it is a widely held fact that dogs are complex ‘life forms’ and are thus not mere manufactures or compositions of matter. The patentees themselves acknowledge this, noting that two dogs suffered “severe depression,” while six dogs were characterized as being “depressed.” As the Request for Re-Examination states, “[T]he examiner is charged with evaluating whether the claims, as a *whole*, constitute patentable subject matter.” Because the dogs admittedly suffered from “depression,” a psychological malady of sentient, self-aware beings, they are, by USPTO standards, not articles of manufacture such as toasters or compositions of matter like a chemical compound and are thus not patentable.



## IMPLICATIONS OF COMPLACENCY

The AAVS campaign challenging the beagle patent is precedent-setting, and complacent action will only further perpetuate the viewpoint that animals are ‘things,’ not sentient beings who are deserving of respect. If AAVS’s Request that the patent be rescinded is granted, it will lay a foundation that animals are *not* appropriate patent ‘matter,’ and it will call into question the ethics of *all* other animal patents, opening the door to the adoption of new USPTO guidelines that prohibit patenting animals. This is extremely important, since the field of animal patenting will only expand, and the researchers of the beagle patent exemplify this, stating, “In alternate embodiments, [we] also contemplate the use of other large animals, such as dog, pig, sheep, monkey, or chimpanzee for the animal model.”

The apparent purpose of this and other patents on animals is to profit from making animals sick and then killing them. However, it is prudent to note that a survey commissioned by AAVS found that 70 percent of those polled believe that patenting animals is unethical (please see sidebar at right). The U.S. Patent and Trademark Office, which is charged with protecting the integrity of scientific invention, needs to know how the public feels regarding this issue.

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*Please contact the U.S. Patent and Trademark Office and tell the agency that you support AAVS’s Request for Re-Examination of Patent No. 6,444,872. Explain that you are opposed to issuing patents on animals such as dogs, who are sentient individuals, not machines or, as the Patent Office states, “compositions of matter.” John Dudas, Acting Director, U.S. Patent and Trademark Office, Mail Stop Comments - Patents, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.*

For more information on AAVS’s Stop Animal Patents campaign, please visit our website at [www.StopAnimalPatents.org](http://www.StopAnimalPatents.org) or contact the Society directly by calling (800)SAY-AAVS to receive our *Patently Cruel: Animals are NOT Inventions* brochure. **AV**

## Survey says: 70% of Americans believe it is wrong to patent animals

In February 2004, the American Anti-Vivisection Society commissioned a scientific survey to learn more about what the public knows and thinks about animal patents. What the data revealed is that the scientific community is working beyond the public’s awareness of such endeavors. But while relatively few Americans are aware that some governments issue and many corporations receive patents on animals, their views are unmistakably clear when asked various questions relating to this practice. More than two in three Americans agree it is unethical for corporations to make animals sick in the hopes of obtaining a patent on that animal, and a similar proportion agree that it is unethical to issue patents on animals as if they were human ‘inventions’. These findings are even more striking because they are expressed relatively uniformly by Americans of all demographic and socioeconomic groups. Differences relate only to the *degree of opposition* to animal patenting, not to the central issue of whether it is acceptable or not.

**Q. As you probably know, a patent is usually granted to inventors giving them the exclusive right to make, use, or sell their inventions. Are you aware that some governments and corporations are getting patents on animals?**

Only 15% of American adults are aware that some governments and corporations are getting patents on animals; no more than two in ten adults in any demographic subgroup are aware of this.

- Men are twice as likely as women to be aware of animal patents (19% vs. 10%).
- Adults with a college degree are also more likely than those with less education to be aware of governments and corporations obtaining patents on animals (20% vs. 12%).

**Please tell me if you agree or disagree with each of the following statements:**

→ **It is unethical for corporations to make animals sick in the hopes of getting a patent on that animal.**

Seven in ten American adults (70%) agree that it is unethical for corporations to make animals sick in the hopes of getting a patent on that animal; only 25% disagree. Large majorities of adults across the board agree this practice is unethical.

→ **It is unethical for governments to issue patents on animals as if they were human ‘inventions.’**

Two in three American adults (68%) agree that it is unethical to issue patents on animals as if they were human ‘inventions;’ only 25% disagree. As with the previous question, majorities of adults across the board think this is unethical.

- Women are more likely than men to agree that it is unethical to issue patents on animals as if they were human ‘inventions’ (71% vs. 64%).
- Agreement against animal patents is slightly higher among adults in more affluent households (\$50,000 or more a year) than those in less affluent homes (75% vs. 65%). **AV**

## BREAKING NEWS!

**The USPTO has granted AAVS’s Request for Re-Examination of the patent on beagles owned by the University of Texas. We thank everyone who has already written about this issue! However, more work still needs to be done. Please continue to write to the USPTO and ask it to rescind Patent No. 6,444,872, beagle dogs who are purposely made sick so that they may be used in experiments. Tell the USPTO that dogs are not machines and they should not be patented!**