

# Technology Transfer & Intellectual Property News

From the University of Kansas System  
Technology Transfer & Intellectual Property.

February 2002  
Vol. 1, Issue 5

## Recently Issued Patents

### University of Kansas Medical Center

Post-Amadori Inhibitors of Advanced Reactions  
Raja Khalifah, PhD., and Aaron Ashley Booth

The present invention provides novel compounds, pharmaceutical compositions, methods, kits, and dialysis solutions for inhibiting the conversion of Amadori compounds to post Amadori advanced glycation endproducts, for treating and preventing chronic tissue damage and diabetic complications, and for inhibiting dialysis-related pathologies.

### University of Kansas at Lawrence

Metal Complexes Immobilized In Porous Organic Hosts  
Andrew Borovik, PhD., and Anjal Sharma

The function of metal ions in biomolecules is controlled by two interrelated structural features; the structure of the metal ion coordination sphere which includes the geometric relationship of metal-bound ligands; and the molecular architecture of the metal binding site that controls the secondary coordination sphere about the metal ion. This patented technology is particularly useful in for reversibly binding NO and oxygen. Thus, composites of the invention can be used to remove NO generated from the combustion of fossil fuels. In addition, composites may also be useful in NO sensor technology.

## KU Lawrence Highlighted Start-up Company

BioComp Systems, Inc. in Lawrence, Kansas has received a Phase II SBIR award from the National Science Foundation. Three-dimensional images improve the visual effects of video devices such as movies, televisions, video games, computer graphics, and radar imaging devices. One current type of 3-D technology uses specially designed "three dimensional" or stereovision glasses for simulating three-dimensional images on a two-dimensional screen. Another method of display separates the information from a three-dimensional image into several two dimensional planes. A third type of three-dimensional display uses laser beams and high precision optical components to access pixels on a rotating helical screen. Although much quieter than other devices, it is extremely expensive.

The Company has licensed two issued patents and one pending patent from the University. The patents refer to an electronic method for displaying images and data in true three dimensions. This electronic method provides a high-resolution display of actual three-dimensional images that are reliable and relatively inexpensive to manufacture.

## Executive Director's Corner

### **How do I know if I have made a new discovery (Invention)?**

An invention is the physical embodiment of a discovery. For an invention to qualify for a U.S. patent it must be novel, non-obvious, and useful. It can be: a device, a manufacturable article, a machine, a composition of matter, a process or method, or a new, useful improvement. Inventorship is distinct from authorship and ownership. Inventorship is a legal issue that is determined by a patent attorney. An inventor is one who conceives and either personally or through someone else reduces the invention to practice. The conception of an invention is complete if the inventor is able to make a disclosure that would enable someone skilled in the art to make the invention without extensive research or experimentation. Someone who constructs the invention based on the inventor's conception is not an inventor. Failure to name the correct inventors could result in invalidation of a patent. If you have questions on any of the above, or would like to discuss an idea you may have, contact James Baxendale as listed below.

### **Are there examples of Inventions disclosed at the University of Kansas?**

Inventions disclosed at the University of Kansas include; World Wide Web browser-accessible database system, drug compound for treating diabetic kidney disease, solar radiation modeling software package, a bone-inducing agent, development of agents used in the production of gasoline, AIDS vaccine, particle-size reduction techniques for pharmaceuticals, compounds and methods to develop safer and effective therapeutic regimens, software for automated seizure detection and prediction, software for modeling aircraft aerodynamics, technique for examining the metabolism of drugs, modified cyclodextrins for use in drug development and formulation, sampling devices for drug analysis, copyrightable design and content for e learning programs, anesthetic gels, design verification system, heated catheter for ablation of tissue, multimedia for training in assistive technology, Herpes Virus antibodies, three dimensional display system, AIDS animal model, video stream comparison analysis, inhibitors of cancer tumor growth, video search engine, treatment for Polycystic Kidney Disease (PKD), web site mapping, software algorithm for database collection, new materials and production methods for superconductors, Histology CD ROM, software design tools for creating online educational content, compounds for treating blood sepsis, protein folding method, algorithm for measuring the elasticity of tissue, software for Medicare tracking of Medical Residents, treatment for infertility and organ transplant rejection, Internet meta-search software programs, and methods to improve the water solubility and absorption of drugs.

**James G. Baxendale, MS, MBA**

Executive Director  
[jbaxenda@kumc.edu](mailto:jbaxenda@kumc.edu)

**KU Medical Center Campus**

Tele: (913)-588-1495  
Fax: (913)-588-8214

**KU Lawrence Campus**

Tele: (785) 864-7783  
Fax: (785) 864-5738