

## **PATENTS AND PATENT APPLICATIONS**

<b>Hydrogels Having Enhanced Elasticity and Mechanical Strength Properties</b>	
Inventors: H Omidian, Y Qiu, DJ Kim, SC Yang, H Park and K Park	
Purdue Research Foundation, West Lafayette, USA	
US Patent 6,960,617	Issued 11/01/2005
US Patent Application 20030232895	Filed: 04/22/2003- Published: 12/18/2003
World Patent Application WO03089506	2003
<b>Formation of Strong Superporous Hydrogels</b>	
Inventors: H Omidian, JG Rocca	
Kos Pharmaceuticals Inc., Fort Lauderdale, USA	
US Patent 7,056,957	Issued 06/06/2006
US Patent Application 20040224021	Filed: 04/20/2004- Published 11/11/2004
World Patent Application WO2004096127	Filed: 04/14/2004- Published 11/11/2004
European Patent EP1620076	Filed: 04/14/2004- Published: 02/01/2006
<b>Superporous Hydrogels for Heavy Duty Applications</b>	
Inventors: H Omidian, JG Rocca	
Abbott Laboratories, Chicago, USA	
US Patent 7,988,992	Issued 08/02/2011
US Patent Application 20080089940	Filed: 07/06/2007- Published: 04/17/2008
World Patent Application WO2009029087	Filed: 07/06/2007-Published: 03/05/2009
European Patent EP2073792	Filed: 07/06/2007- Published: 07/01/2009
<b>Very-Pure Superporous Hydrogels Having Outstanding Swelling Properties</b>	
Inventors: H Omidian, C Gavrilas, W Han, G Li and JG Rocca	
Abbott Laboratories, Chicago, USA	
US Patent Application 20080206339	Filed: 02/25/2008- Published: 08/28/2008
World Patent Application WO2008106401	Filed: 02/25/2008-Published: 09/04/2008

## **BOOK CHAPTERS**

1. D Mastropietro, H. Omidian; **Mucoadhesive Drug Delivery Systems** in “Engineering Polymer Systems for Improved Drug Delivery”, RA Bader and D Punam (Eds), Wiley, in preparation, 2011
2. H Omidian, S Fesharaki, K Park; **Oral Controlled Delivery Mechanisms and Technologies** in “Controlled Release in Oral Drug Delivery”, Chapter 6; C Wilson, P Crowley (Eds), August 2011.
3. H Omidian, K Park; **Hydrogels** in “Fundamentals and Applications of Controlled Release Drug Delivery”; R Siegel, M Rathbone, J Siepmann (Eds); CRS Book Series (Publisher), October 2011.

4. H Omidian, K Park; **Superporous Hydrogels for Drug Delivery Applications** in “Comprehensive Biomaterials”, Chapter 44; P Ducheyne, D W Hutmacher, J Kirkpatrick, K Healy (Eds); Elsevier (publisher), August 2011.
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2. D. Mastropietro, H. Omidian, K Park: Superporous Hydrogels in Drug Delivery Applications, *Expert Opinions in Drug Delivery*, Submitted Aug 2011.
3. D Mastropietro, H Omidian: Current Approaches in Tamper-Resistant and Abuse-Deterrent Formulations, *Drug Development and Industrial Pharmacy*, submitted June 2011.
4. K Kabiri, S Hesarian, MJ Zohuriaan-Mehr, A Jamshidi, H Bouhendi, MR Pourheravi, SA Hashemi, H Omidian, S Fatollahi: Superabsorbent Polymer Composites, Does Clay Always Improve Properties? *Journal of Materials Science*, 46(20), 6718-6725, 2011.
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## **PRESENTATIONS AND ABSTRACTS**

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3. H Omidian, D Mastropietro: Thermoresponsive Physical and Chemical Hydrogels in Drug Delivery, 2nd World Congress BABE-2011 & Pharmaceutica-2011, Las Vegas, USA, June 2011, accepted
4. D Mastropietro and H Omidian: Oral Abuse-Deterrent Formulations Using Physical Barriers, 2nd World Congress BABE-2011 & Pharmaceutica-2011, Las Vegas, USA, June 2011, accepted
5. UD Kandalam, and H Omidian: Cytotoxicity of Ester-based Superporous Hydrogels, *2011 AAPS National Biotechnology Conference*, San Francisco, USA, May 2011
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## GRANTS

Smart Polymers to Reduce Alcohol Absorption into Systemic Circulation (PI)	2012 Chancellor's Grant: Nova Southeastern university, Fort Lauderdale, USA, 2011	\$10,000
Alginate/Hydroxyapatite Nanocomposite Scaffolds for Bone Tissue Engineering (Collaborator)	2011 Chancellor's Grant: Nova Southeastern University, Fort Lauderdale, USA, 2010	\$10,000
Expandable Platforms for Gastric Retention Controlled Drug Delivery Systems (PI)	2010 President's Grant: Nova Southeastern University, Fort Lauderdale, USA, 2009	\$10,000
Swellable Platforms for Gastric Retention Controlled Drug Delivery Systems (PI)	HPD Grant: Nova Southeastern University, Fort Lauderdale, USA, 2009	\$5,000
Formulation and Development of Superabsorbent Polymers for Hygiene Applications (PI)	Nava-Baspar Chemical Company, Tehran, Iran, 2000	\$5,500
Formulation and Development of Superabsorbent Polymers for Agricultural Applications (PI)	Nava-Baspar Chemical Company, Tehran, Iran, 1998	\$4,500

## BOOKS

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