

Patent Selections:

The patents annotated in this section have been selected from various patent collections. They are recent patents categorized by materials, biomaterials, biological materials, magnetic materials, medical implant materials, nanomaterials, ceramics, plastics, polymers, semi-conductors, coatings, composites, paper, wood, textile, methods design, techniques and are relevant to the articles published in this journal issues.

MERCAPTIDES

1. Kimura, R., Ishizuka, H., Shibasaki, J. Antibacterial composition for medical tool. *US20077279509 (2007)*.
2. Balogh, P., Hegedues, O. Mixture for preparing hydrophobic preparation, procedure of manufacturing thereof and utilization thereof. *EP1840099 (2007)*.
3. Cherstkov, V.F., Delyagina, N.I., Fernandez, R.E., Petrov, V.A., Paul, R. Fluorosulfates of hexafluoroisobutylene and its higher homologs. *US2077276624 (2007)*.
4. Chaves, A., Pohl, E.R., Vecere, L., Hwang, L., Pickwell, R. Rubber composition containing organofunctional silane. *WO07100532 (2007)*.
5. Chaves, A., Pohl, E.R., Vecere, L., Hwang, L. Process for making organofunctional silanes and mixtures thereof. *WO07098120 (2007)*.
6. Dahlund, M. Improved method for on-line removal of corrosive components of transformer oil. *WO07096709 (2007)*.
7. Dong, C.C., Karwacki Jr., E.J., Patrick, R.E., Roberts, D.A., Pinschmidt Jr., R.K., Norman, J.A.T., Ivankovits, J.C. Electron attachment assisted formation of electrical conductors. *EP1827066 (2007)*.
8. Kennedy, T.J., Tzivanis, M.J., Melanson, D.M. Golf ball which includes fast-chemical-reaction-produced component and method of making same. *US20077244196 (2007)*.
9. Halbert, T.R., McKnight, C.A., Greeley, J.P., Cook, B.R., Brignac, G.B., Greaney, M.A., Welch, R.C. Selective hydroprocessing and mercaptan removal. *US20077244352 (2007)*.
10. Hawrylko, R.B., Krause, P.W., Levesque, M. Use of calcium carbonate in rigid poly(vinyl chloride) compositions. *US20077238739 (2007)*.
4. Burton, D.R., Holm, J.C., Yates, J.M. Valves having corrosion resistant ceramic coating and methods and systems for manufacturing same. *WO07115043 (2007)*.
5. Kapourchali, M., Khalilian, N. Thin-film coating for wheel rims. *US20077279078 (2007)*.
6. Bloom, D., Moore, N.B., Krueger, V.R.E. Gripper assembly for downhole tools. *US20077275593 (2007)*.
7. Martin, W.A., Martin, T. Grill cleaning device. *US20077275278 (2007)*.
8. Dumm, T.F. Lubricious coatings. *WO07108824 (2007)*.
9. Cooke, E.P., Evans, R.D., Doll, G.L., Kruse, R.P. Surface treatments for spiral bevel gear sets. *WO07109784 (2007)*.
10. Helmuth, J., Scheibe, H.-J., Schuelke, T., Woodrough, G.L. Tetrahedral amorphous carbon coated medical devices. *WO07109714 (2007)*.

POLYACRYLAMIDE & BIOMATERIALS

1. Lean, M.H., Hsieh, H.B., Fitch, J.S., Volkel, A.R., Preas, B., Elrod, S., Bruce, R.H., Peeters, E., Torres, F., Chabiny, M. Distributed multi-segmented reconfigurable traveling wave grids for separation of proteins in gel electrophoresis. *US20077156970 (2007)*.
2. Freimuth, P.I. Structure of adenovirus bound to cellular receptor car. *US20077157266 (2007)*.
3. Bukshpan, S., Zilberstein, G. Separation of Analytes by Molecular Mass. *WO07004225 (2007)*.
4. Kern, S.E.; Brody, J.R. Conductive media for electrophoresis. *US20077163610 (2007)*.
5. Bukshpan, S., Zilberstein, G. Matrixes, arrays, systems and methods. *US20077166202 (2007)*.
6. Jacobs, J.W., Qin, S., Zhang, M., Li, H., Park, M.-O. Human growth hormone conjugated with biocompatible polymer. *WO07018583 (2007)*.
7. Lew, C., Pentoney Jr, S.L., Yang, D.L. Serial sample injection in capillary electrophoresis. *US20077179357 (2007)*.

LIQUID CRYSTAL ALIGNMENT

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 2. Cho, J., Oliver, S., Jones, W., Sammakia, B. Surface coating for electronic systems. *US20077282254 (2007)*.
 3. Wietzoreck, H., Wendel, T., Eriksson, M. Method for coating of metallic coil or sheets for producing hollow articles. *WO07113141 (2007)*.

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2. Presura, C., Van Der Werf, J.E. Alignment system and lithographic apparatus equipped with such an alignment system. *US20077283236 (2007)*.
3. Iftime, G., Mahabadi, H.K., Kazmaier, P.M. Device with multiple liquid crystal layers. *US20077282245 (2007)*.
4. Iwase, Y., Kijima, Y., Yamada, J. Electroluminescent display having an adhesive layer comprised of two or more liquids. *US20077282856 (2007)*.
5. Schmidt, W., Hornung, B., Wingen, R. Fluorinated xanthenes and use thereof in liquid-crystal mixtures *US20077282246 (2007)*.
6. Huang, L., Glebov, A., Aoki, S., Lee, M.G., Yokouchi, K. Methods and apparatuses for measuring the refractive index and other optical properties of liquids, gels, and solids. *US20077283220 (2007)*.
7. Inada, H. Method for solid phase diffusion of zinc into an InP-based photodiode and an InP photodiode made with the method. *US20077282428 (2007)*.
8. Yamaguchi, T., Mihashi, T. Optical-characteristic measurement apparatus and fundus-image observation apparatus. *US20077281797 (2007)*.
9. Tanaka, T. Liquid crystal display device and electronic apparatus wherein liquid crystal molecules having particular pre-tilt angle. *US20077283191 (2007)*.
10. Kato, S. Measuring method and apparatus using interference, exposure method and apparatus using the same, and device fabrication method. *US20077283252 (2007)*.

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1. Xiang, X.-D., Yang, H., Wang, G. Detection with evanescent wave probe. *US20077282911 (2007)*.
2. Holland, J.R., Varma, K.S., Holden, D.W. Fire resistant glazings. *US20077282092 (2007)*.
3. Muller, M. Red blood cell processing systems and methods which control red blood cell hematocrit. *US20077282154 (2007)*.
4. Su Yu, J., Belyaev, S.V., Jeon, B.K., Skjonnemand, K., Perrett, T., Parri, O. Compensator comprising a positive and negative birefringent retardation film. *US20077283188 (2007)*.
5. Kim, H.-C., Miller, R.D. Patterned, high surface area substrate with hydrophilic/hydrophobic contrast, and method of use. *US20077282241 (2007)*.
6. Hashimoto, K. Cellulose acylate-based dope, cellulose acylate film, and method of producing a cellulose acylate film. *US20077282091 (2007)*.
7. Bridgham, J., Corcoran, K., Golda, G., Pallas, M.C., Brenner, S. System and apparatus for sequential processing of analytes. *US20077282370 (2007)*.
8. Helgee, B., Komitov, L. Liquid crystal device, a method for producing a liquid crystal device and a

method for controlling a liquid crystal device. *US20077283196 (2007)*.

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1. Mendoza, E.A., Kempen, L.U., Lieberman, R.A. Integrated optic devices and photosensitive sol-gel process for producing integrated optic devices. *US20077283717 (2007)*.
2. Nanba, N. Zoom lens and image pickup apparatus including the same. *US20077283314 (2007)*.
3. Yano, T., Shimizu, M., Matsui, N., Setomoto, T., Tamura, T. LED lamp. *US20077282853 (2007)*.
4. Russell, D.H., McLean, J.A. Advanced optics for rapidly patterned laser profiles in analytical spectrometry. *US20077282706 (2007)*.
5. Cossairt, O.S. Thomas, M., Dorval, P.K., Favallora, G.E. Optical systems for generating three-dimensional images. *US20077283308 (2007)*.
6. Little, B.E., Hryniewicz, J.V., Gill, D.M., Davidson, R., Absil, P. Method of forming an integrated optical circuit. *US20077282311 (2007)*.
7. Ouderkirk, A.J., Hart, S.D., Benson, O. Jr., Fleming, P.R., Thunhorst, K.L. Structured composite optical films. *WO07115041 (2007)*.
8. Shimizu, Y. Process for producing optical waveguide. *EP1843178 (2007)*.
9. Togino, T. Visual display apparatus. *EP1843605 (2007)*.

HOLOGRAPHIC OPTICAL DATA

1. Kim, K.-S., Hwang, I.-W., Seong, P.-Y. Tracking error signal detecting method selectively using a push-pull method, an improved push-pull method, and a three beam method and optical recording/reproducing apparatus using the same. *US20077283440 (2007)*.
2. Setthachayanon, S., Phan, X.T., Michaels, M.D., Ihas, B.C. Long-term high temperature and humidity stable holographic optical data storage media compositions with exceptional high dynamic range. *US20077282322 (2007)*.
3. Prelewitz, D., Gray, R., Gerchberg, R., Weiner, M. Digital imaging assembly and methods thereof. *US20077282716 (2007)*.
4. Abraham, N.C., Hofmann, H., Keating, R.L. Optically variable device mastering system, method of authenticating articles employing the same, and resultant article. *WO07114976 (2007)*.
5. Roh, J.-W., Park, J.-Y. Apparatus, recording and reproducing methods for holographic optical information data. *EP1843224 (2007)*.
6. Hak-Sun, K., Pil-Sang, Y., Eui-Seok, H. Optical information reproducing apparatus and optical information reproducing method using the same. *EP1843333 (2007)*.

7. Kyu-Ii, J. Optical information reproducing apparatus and optical information reproducing method using the same. **EP1843334 (2007)**.
8. Nishi, N., Tezuka, M. Optical head and recording and/or reproducing apparatus. **US20077280449 (2007)**.
9. Schuurmans, F., Bakker, L. Setup for storing data in a holographic storage medium and phase plate. **WO07110845 (2007)**.
10. Peng, B., Sahm, H. Photo-curable resins and resin compositions with very high refractive indices for application in plastic optics. **WO07110387 (2007)**.