#### **Industry News**

- Oskar Blues introduces the intelligent zip-top can package
- Beer packaging which could color for two times
- Tsinghua University researches and develops the new type of "spongia ceramics"
- Japan develops the first nonwovens with high softness and high strength.

#### **Theme Report**

Common process diagram

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#### **Black-tech**

With Nanopatch nano paster vaccine, the injection history for a century will terminate.

## **Diagram I of Common**

## **Printing Technology**









# Oskar Blues introduces the intelligent zip-top can package

Recently, Oskar Blues Winery and ASA company have jointly developed a kind of new package, and they implant a thin film chip in zip-top can by Thinfilm technology. At that time, the intelligent device with NFC (near field communication) function could read its relevant day as long as it is close to such zip-top can.

Chad Melis, the marketing director of Oskar Blues, indicates that "we are very glad to unite the innovation technology to promote the Oskar Blues brand better." It is reported that such intelligent zip-top can will be listed recently, and Oskar Blues also invites special artist to re-design the package of such wine.



## Beer packaging which could color for two times

So far, the coloring package isn't fresh thin. But, how does the package color twice? Recently, the light beer brand Coors Light which is the subordinate to the Molson Coors company introduces a kind of package which colors on the basis of temperature and light. At the most suitable temperature for drinking, the blue on the can would occur; When the consumers place the bottle under the sun, the yellow, orange and red on the package would occur. It calls itself as "the first wine which could be activated by the sun in the world". The ink with the temperature sensation and light sensation is adopted in such package. The orange and yellow ink activated by UV doesn't indicate the beer is too warm, Garrick Frittelli, the marketing manager of Coors Light says the lower the temperature is, the more fresh the color is.

# 印刷资讯

## Tsinghua University researches and develops the new type of "spongia ceramics"

Recently, the research team of Tsinghua University researches a kind of "spongia ceramics" which could overcome the breakable defect of ceramic. Since the material is weaved by ceramic nano fiber into the spongia, therefore it is very light. The specific working principle is that the ceramic solution sprays to the spinning box from small spinning orifice, then the sprayed silk could twine together, just like the production of cotton candy with sugar silk. So, the final materials manufactured could be soft and light like the cotton candy. When people extrude such ceramic materials, the material could be flattened, then rebound to the primitive form approximately, and wouldn't be destroyed.

#### Japan develops the first nonwovens with high softness and high strength.

On May 25, Mitsui Chemicals Co., Ltd. published the information that it successfully developed the first skin-friendly high-performance nonwovens AIRYFA with the high softness and high strength in global? . The production technology of nonwovens is always difficult to meet the demand of high softness and high strength at the same time. This time, the unique polyolefin spin technology in Mitsui Chemicals Co., Ltd. is used to design the fiber into the super-thin hollow structure, thus the previous technology problem is overcame, and the nonwovens after production is not only light and soft, but owns the high strength. New-style super-thin hollow structure also greatly reduces the usage amount of plastic raw materials, which is conductive to the environmental protection.

#### **Hot Stamping**











Hot stamping



Hot stamping concave

Hot stamping convex

Definition: Its scientific name is hot pad printing, commonly known as hot stamping and silver plating. It refers to the method that the metal foil is stamped on the printing materials by virtue of certain pressure and temperature, and its opposite matter is cold pad printing. Hot stamping features: With metallic luster and magnificence, it could make the printing scene generate the strong comparison. Applicable scope: It's suitable for the very highlighted writing, sign and patterning.

Notes: They are more highlighted to coordinate the convex or concave process; Except for the gold and silver color, the mosaic gold, X-Ray, transparent color, etc. could be selected.

**Embossing/Debossing** 











#### Concave

#### Debossing

#### **Embossing debossing**

#### Hot stamping debossing

Definition: The convex template (positive template) is utilized to stamp the surface of printing material into embossing patterns (partial printing materials are embossed for stereo feeling, causing the visual impact) with stereo feeling by pressure function, which is called as debossing; The concave template (negative template) is utilized to stamp the surface of printing material into embossing patterns (partial printing materials are sunken for stereo feeling, causing the visual impact) with stereo feeling by pressure function, which is called as concave.

Features: The stereo feeling is added

Notes: Its effect is better with the hot stamping, partial UV and other processes.

### **Film Recovery**







### Screen printing light UV



Dull adhesive lamination

Dull adhesive lamination



The film recovery process is the processing technology on the surface of paper. It refers that the film recovery machine is used to cover a layer of very thin transparent plastic film on the surface of printing products. The surface of printing material after film recovery is smoother, brighter, more resistant to dirt, water and wearing, and the color of cover of books & magazine is more resplendent. So the products aren't easy to be damaged. The abrasion resistance, folding endurance,

tensile resistance and wet fastness of printing products are strengthened to a large extent, which improves the service life and beautifies the appearance effect of various printing products.





Partial silk-screen printing of UV gloss oil





Partial silk-screen printing of UV gloss oil

Offset printing connection of partial light UV

Definition: Special process for full or partial solidification of UV gloss oil on the surface of printing materials Features: It could show many special art effect on the surface of printing material, making the printing material more exquisite Processing: Oil machine, offset printing, silk-screen printing, flexible printing and gravure Notes: UV gloss oil is usually as the protection technology on the surface of printing materials except for realization of light and sh

Notes: UV gloss oil is usually as the protection technology on the surface of printing materials except for realization of light and shade effect of artwork to decorate the printing products by the bright and dull comparison.



## Part Special UV





Wrinkle UV

Colorful onion (add onion power in UV)

**Dull polish UV** 

Wrinkle UV





The intelligent home isn't the idle theorizing, and it isn't a dream to achieve the whole intelligent home. Recently, the researcher installs the sense which could monitor various data on the small-scale circuit board, which could achieve the whole intelligent home. Such circuit board in the size of biscuit could monitor the motion, voice, air pressure, humidity, temperature, light intensity, electromagnetic interference and other data. In the kitchen, the sensor could discern the switch of faucet and the extraction of tissue. In office, such sensor could discern the door knocking. In the public area, such sensor successfully discerns whether the coffee maker and microwave oven are normally used and the switch of door. At present, the accuracy of the sensor and the supporting machine learning software has been very good. But if they hope such product commercializes, its accuracy shall be further improved.





Founded in 1978, Zhongrong Printing & Packaging is the **comprehensive printing packaging scheme service provider** which focuses on providing the design, production and service for the relevant paper printing packaging products.

We believe we could create value by grasping the information and focusing on the innovation! Hope to forge an exchange platform to mutually learn and commonly make progress with the customer by printing the information report, sharing information, focusing on innovation and promoting the service value!

**For more information, please log in our website:** <u>http://www.zrp.com.cn</u> or contact Mr. Tan Ronghong for group research and development.

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