

# Transparent Displays: Technologies and Global Markets

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# Abstracts

Report Scope

This report provides an updated review of various types of transparent displays and their fabrication processes and identifies current and emerging applications for these products.

BCC Research delineates the current market status for transparent displays, defines trends, and presents growth forecasts for the next five years. The market is analyzed based on the following segments: device category, application, and region. In addition, technological issues, including key events and the latest process developments, are discussed.

More specifically, the market analysis conducted by BCC Research for this report is divided into five sections.

In the first section, an introduction to the topic and an historical review of transparent displays are provided, including an outline of recent events. In this section, current and emerging applications for these devices are also identified and grouped according to seven main categories (construction, consumer products, defense and security, electronics and optoelectronics, healthcare, industrial, and transportation).

The second section provides a technological review of transparent displays. This section offers a current and detailed description of various methods used for fabrication of transparent displays; typical materials used to produce these devices; technological trends in device fabrication; and new and emerging technologies. This section concludes with an analysis of the most important technological developments since



2015, including examples of significant patents recently issued or applied for, as well as highlighting the most active research organizations operating in this field.

The third section entails a global market analysis for transparent displays. Global revenues (sales data in millions of dollars) are presented for each segment (device category, application, and region), with actual data referring to the years 2016 and 2017 and estimates for 2018. Dollar figures refer to sales of transparent display-based products at the manufacturing level and do not include auxiliary devices used to create content and transmit it to the display, such as video generation systems, personal computers, and network systems, or supporting software.

The analysis of current revenues is followed by a detailed presentation of market growth trends, based on industry growth, and industry and regional trends. The third section concludes by providing projected revenues for transparent displays within each segment, together with forecast compound annual growth rates (CAGRs) for the period 2018 through 2023.

In the fourth section of the study, which covers global industry structure, the report offers a list of the leading suppliers and developers of transparent displays, together with a description of their products. The analysis includes a description of the geographical distribution of these firms and an evaluation of other key industry players. Detailed company profiles of the top players are also provided.

The fifth and final section includes an analysis of recently issued U.S. patents, with a summary of patents related to transparent display, materials, fabrication methods, and applications. Patent analysis is performed by region, country, assignee, patent category, device type, technology type and application.

Report Includes:

34 data tables and 19 additional tables

An overview of the global markets for transparent displays

Analyses of global market trends, with data from 2016 and 2017, estimates for 2018, and projections of compound annual growth rates (CAGRs) through 2023

Information on the various types of transparent displays and a detailed description of current and emerging applications for these devices



Examination of market growth trends based on industry growth, technological trends, and regional trends

Coverage of popular production methods, latest technological developments, and current research activities related to these devices

Patent analyses related to various types of transparent displays and their fabrication methods and applications

Comprehensive profiles of the leading suppliers of transparent displays and other key players, along with descriptions of their products and their activities in this market, including General Motors, Grandwell Industries, LG Display, Panasonic & Samsung Electronics



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**AU OPTRONICS** 

**BAE SYSTEMS** 

BENEQ

**BOE TECHNOLOGY GROUP** 

**GENERAL MOTORS** 

**GRANDWELL INDUSTRIES** 

HONEYWELL AEROSPACE

**KONICA MINOLTA** 

LG DISPLAY

MICROSOFT

**OSTERHOUT DESIGN** 

PANASONIC

POLYTRONIX

**PRO DISPLAY** 

**ROCKWELL COLLINS** 

SAMSUNG ELECTRONICS

**SEIKO EPSON** 

TOSHIBA

VISIONOX



#### VUZIX

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