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(54) COMPOUND MICRO-ASSEMBLY STRATEGIES AND DEVICES

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(57)ABSTRACT

The disclosed technology relates generally to designs and methods of assembling devices utilizing compound microassembly. Functional elements are micro-assembled to form an array of individual micro-systems on an intermediate substrate, then the microsystems are transferred (one or more at a time) to a destination or device substrate. For example, for a display device, each micro-system may be an individual pixel containing red, blue, and green micro LEDs and a silicon drive circuit. An array of pixels may be formed by micro-transfer printing functional elements onto the intermediate substrate and electrically connecting them via fine lithography, then the individual pixels may be microtransfer printed onto the destination substrate.

