irradiation is conducted after patterning the semiconductor layer. The laser light irradiation may be conducted before the patterning.

[**0083**] Next, various elements (such as a thin film diode, a photoelectric conversion element which is made of silicon and has a PIN junction, and a silicon resistor element) represented by a TFT are produced by forming electrodes, wirings, an insulating film, and the like to complete the layer to be peeled **11***b*, and then the layer to be peeled **11***b* is peeled from the substrate **10**.

[**0084**] Note that the peeling method is not particularly limited. Here, a peeling method utilizing film stresses of a metallic layer or a nitride layer and an oxide layer is used as a peeling method which is not limited by a heat treatment temperature and a kind of substrate. First, before the state shown in **FIG. 1A** is obtained, a nitride layer or a metallic layer (not shown) is formed on the substrate **10**. A typical example of the nitride layer or the metallic layer includes a single layer made of an element selected from the group consisting of Ti, W, Al, Ta, Mo, Cu, Cr, Nd, Fe, Ni, Co, Ru, Rh, Pd, Os, Ir, and Pt, or an alloy material or a compound material which contains mainly the element, or a laminate of those. In addition, a single layer made of nitride containing the element, for example, titanium nitride, tungsten nitride, tantalum nitride, or molybdenum nitride, or a laminate of those may be used. Next, an oxide layer (not shown) is formed on the nitride layer or the metallic layer. For a typical example of the oxide layer, a silicon oxide material, a silicon oxynitride material, or a metallic oxide material may be used. Note that the oxide layer may be formed by any film formation method such as a sputtering method, a plasma CVD method, or an applying method. It is important that film stress of the oxide layer is different from that of the nitride layer or the metallic layer. The respective film thicknesses are preferably set as appropriate in a range of 1 nm to 100 nm, thereby adjusting respective film stresses. In addition, an insulating layer or a metallic layer may be provided between the substrate and the nitride layer or the metallic layer to improve the contact property to the substrate **10**. Next, a semiconductor layer is preferably formed on the oxide layer to obtain the layer to be peeled **11***a*. Note that, according to the above peeling method, even if the film stress of the oxide layer is different from that of the nitride layer or the metallic layer, film peeling or the like is not caused by heat treatment in a manufacturing step for the layer to be peeled. In addition, according to the above peeling method, the film stress of the oxide layer is different from that of the nitride layer or the metallic layer. Thus, peeling can be produced by relatively small force. In addition, the example in which the layer to be peeled **11***b* having a sufficient mechanical strength is assumed is indicated here. When the mechanical strength of the layer to be peeled **11***b* is insufficient, it is preferable that peeling is conducted after a support member (not shown) for fixing the layer to be peeled **11***b* is bonded thereto. Note that, when the layer to be peeled **11***b* is peeled, it is important to prevent a bend of the layer to be peeled **11***b* so that a crack is not caused in the layer to be peeled.

[**0085**] Thus, the layer to be peeled **11***b* which is formed on the oxide layer can be separated from the substrate **10**. A state obtained after peeling is shown in **FIG. 1B**. In a stage shown in **FIG. 1**B, not only the semiconductor layer but also electrodes, wirings, and the like are formed. However, for simplification, they are not shown here.

[**0086**] The peeled layer **11***c* can be bent. A state obtained after the bending is shown in **FIG. 1C**. The peeled layer **11***c* is bent in a bending direction **19**. It is needless to say that the peeled layer can be bonded to a transfer body (not shown) having a curved surface.

[**0087**] In **FIG. 1**C, reference numeral **15** denotes a driver circuit (X-direction), **16***a* denotes a semiconductor layer provided in the driver circuit (X-direction), **16***b* denotes a channel length direction of the semiconductor layer **16***a*, **17** denotes a driver circuit (Y-direction), **18***a* denotes a semiconductor layer provided in the driver circuit (Y-direction), and **18***b* denotes a channel length direction of the semiconductor layer **18***a*.

[**0088**] Thus, the maximum feature of the present invention is that the laser light irradiation direction **14***b* and the channel length directions **13***b*, **16***b*, and **18***b* of all the semiconductor layers provided in the layer to be peeled are set to be the same direction, and these directions and a bending direction **19** are set to be orthogonal to each other.

[**0089**] Note that, in order to further clear a correlation among these directions, the case where a TFT is noted is shown in **FIG. 2**. **FIG. 2** briefly shows a TFT having a semiconductor layer **20**, a gate electrode **21**, and electrodes (source electrode and drain electrode) **22** and **23**. Note that the TFT can be produced as follows by using a known technique. First, a semiconductor film having an amorphous structure (made of amorphous silicon or the like) is crystallized by a known crystallization technique to produce a semiconductor film having a crystalline structure (made of polysilicon or the like), and then patterned into a predetermined shape to form the semiconductor layer **20**. Next, the semiconductor layer **20** is covered with a gate insulating film (not shown) and then the gate electrode **21** is formed so as to partially overlap the semiconductor layer **20** through the insulating film interposed therebetween. After that, an impurity element for imparting an n-type or p-type conductivity is added to a portion of the semiconductor layer to produce a source region and a drain region, an interlayer insulating film (not shown) covering the gate electrode is formed, and the electrodes (source electrode and drain electrode) **22** and **23** electrically connected with the source region and the drain region are formed on the interlayer insulating film.

[**0090**] In the present invention, laser light whose scanning direction is a scanning direction **25** shown in **FIG. 2** is used for manufacturing the TFT. In addition, a portion of the semiconductor layer **20** which is overlapped with the gate electrode **21** through the gate insulating film interposed therebetween serves as a channel. Thus, a channel length direction becomes a channel length direction **24** shown in **FIG. 2**. The scanning direction **25** of laser light becomes the same direction as the channel length direction **24**. In addition, a channel width direction which is a direction orthogonal to the channel length direction **24** is the same direction as a bending direction. The bending direction becomes a bending direction **26** shown in **FIG. 2**. Note that the example of a top gate TFT is shown in **FIG. 2**. The present invention can be applied to, for example, a bottom gate (inverse staggered) TFT or a staggered TFT independent on the TFT structure.

[**0091**] Although a TFT in which a semiconductor layer containing silicon serves as an active layer is shown here,