

Patent Drafting for Beginners
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Lecture - 36
Types of Claims

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Two types of claims

Independent claims

Dependent claims

Multiple dependent claims
(reference to more than one claim)



Types of claims: there are broadly two types of claims, first is the independent claim and second we have the dependent claims. Now, the dependent claims may also be multiple dependent claims in which you have reference to more than one claim, so that is a subset of the dependent claims. So, the dependent claim could also be multiple dependent claims where you have more than one reference to a claim.

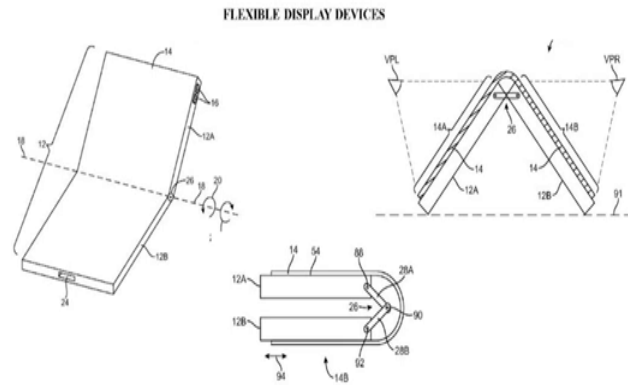
Now, we will show you more examples then things will be much clearer.

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A Granted Patent for Foldable iPhone

United States Patent
Rothkopf et al.

Patent No.: US 9,504,170 B2
Date of Patent: Nov. 22, 2016



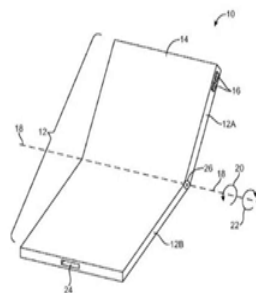
Now, let us look at a pattern granted for a foldable iPhone, this is a pattern that has been granted to apple that is the pattern number for you and this is what the phone is about its a flexible iPhone.

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Foldable iPhone patent

Independent Claim

1. An electronic device, comprising:
 - a housing structure;
 - a **flexible support structure** mounted to the housing structure; and
 - a **flexible display** mounted to the flexible support structure,wherein the flexible display has first and second portions,
wherein the flexible display is movable between planar position in which...
wherein the flexible support structure is configured to hold the flexible display...
wherein the flexible support structure comprises...



Now, if we analyze the claims you can see the independent claims beginning with a preamble and a transition. The preamble being an electronic device and the transition being comprising and then you have the body, a housing structure, a flexible support

structure, mounted to the housing structure. Now, notice something that is happening here which we have which we have covered.

The first time you mention a housing structure you are mentioning something for the first time you are introducing that into the claim language for the first time. So, you use the indefinite article a.

In the second class when housing structure is mentioned again you change it to a definite article the housing structure. Now, this is what we call antecedent basis. Because you have already mentioned housing structure you can call it the housing structure or set housing structure it is another thing other way to look at it or you can even say such housing structure.

So, antecedent basis is to ensure that wherever you mention an element you ensure that that element as see in an earlier reference. And the first time you mentioned an element it has to be indefinite. So, this is a style that is followed the first time you mention an element in this case, the first class you will see the housing structure the housing structure is an element which has been mentioned and that will be that will be mentioned using an indefinite article a.

The second place where you mention it you will be using the now, you can see that. Now, and notice how the punctuation operates. You have the semicolon followed by, and a flexible display mounted to the flexible support structure. So, you have already introduced the flex a flexible support structure in this clause, here you can use the flexible support structure because it is already introduced. Because you are introducing a flexible display for the first time you use a whereas, this flexible support structure its already been introduced in the earlier clause you can now, call it the.

So, in pattern drafting especially when you are drafting the claims the first time you introduce an element you use an indefinite article a or an and every other time you refer it you call it the, said, such or whatever appropriate language that you can use. Now, again there is another transition. Now, we saw the first transition that was comprising. Now, comprising these three things wherein which means it is a further detail to what has already been described wherein whenever you use wherein you would usually explain things that are already preceded.

So, wherein the flexible display notice that it is the flexible display, because flexible displays already been introduced has first and second portions, wherein the flexible display is movable between planar position in which we have not we have abbreviated that sentence, wherein the flexible support structure is configured to hold the flexible display. So, now, you will get a gist of how the claim is written by analyzing this independent claim. So, an electronic device is what we call the preamble, comprising is the transition, and following the transition you have the body.

The body comprises of 3 parts a housing structure, a flexible support structure and a flexible display. Now, what is the flexible support structure? What is the display about? All those thing can be flushed out the details can be flushed out by using the wherein language. Wherein can be in different clauses, wherein the flexible display you can explain has two portions, wherein the flexible display is movable that can be a separate clause, wherein the flexible support structure you can explain it. If you want to you can even say wherein the housing structure if you want to explain the housing structure. So, this is what we call an independent claim.

An independent claim has to be the first claim of your claims when you draft it, because an independent claim can stand on its own. An independent claim does not has any cross reference to another claim. So, though we have abbreviated this we have not shown certain clauses here you can understand that this claim stands on its own.

So, what the function of an independent claim is to have a broad very broad claim and an independent claim which figures first is usually the broadest claim over the invention. All limitations would normally be introduced into or variants or improvements would be introduced independent claim.

Now, we will see that. Now, keep this bear this in mind. An electronic device comprising a housing structure, a flexical support structure and a flexible display wherein various things are explained is the independent claim, wherein the support flexible support structure comprises now. Here you find another level of a transition. So, probably the third level of transition first level of transition was comprising, the second level was wherein and now, wherein the support the flexible support structure comprises you are going to say certain things. So, so you can see the third level of transition coming in. Comprises you are going to explain the support flexible support structure in detail.

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Foldable iPhone patent

Independent Claim

1. An electronic device, comprising:
 - a housing structure;
 - a **flexible support structure** mounted to the housing structure; and
 - a **flexible display** mounted to the flexible support structure,wherein the flexible display has first and second portions,
wherein the flexible display is movable between planar position in which...
wherein the flexible support structure is configured to hold the flexible display...
wherein the flexible support structure comprises...

Dependent Claims

2. The electronic device defined in claim 1 wherein the **flexible support structure** comprises a **sheet of flexible metal**.
3. The electronic device defined in claim 2 wherein the **sheet of flexible metal** comprises **nitinol**.



Now, let us look at the corresponding dependent claim for this. The electronic device defined in claim 1. Now, that is a preamble, wherein the transition the flexible support structure comprises a sheet of flexible metal. So, what did this independent claim do? This independent claim brought in a limitation of the flexible support structure comprises a sheet of flexible material.

Now, this brings a limitation to the claim. So, the independent claim did not have a restriction on what kind of flexible support structure that it has to be a metal whereas, the dependent claim because it is based on claim 1 the independent claim can introduce a limitation as to what the flexible support structure should comprise off. It comprises a sheet of flexible material.

So, now, you can see that. The dependent claim cannot be read without looking into the independent claim because it cross refers to what you can see here claim 1. It cross refers claim 1 and because claim 1 is introduced by cross reference you have to read claim 1 to understand the full impact of claim 2. So, this is a way in which dependent claims are written. Dependent claims need not recite the entire elements described in the independent claim it just can import everything by a cross reference.

So, now, we understand the limitation that claimed true introduces as a limitation to this element that is element number 2, the element number 1 is housing structure, 2 is the flexible support structure and the flexible displays the third element. So, the second

element now has a limitation that it is a sheet of flexible material. So, this is a limitation that is introduced. The third dependent claim reads the electronic device defined and claim 2 where in the sheet of flexible metal comprises nitinol.

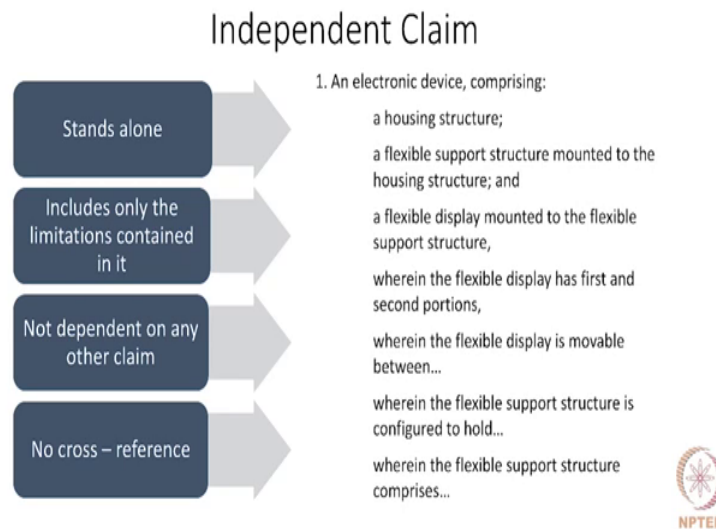
Claim 3 is a dependent claim which is dependent on claim 2 because it has a cross reference to claim 2 you can see that defined in claim 2 and the limitation is on the flexible sheet material which was introduced in claim 2. Now, we introduced this flexible sheet material here and the flexible sheet metal is now, added a further limitation that it comprises of nitinol.

So, this is a dependent claim which incorporates a reference to claim 2. So, you can see how the structure flows. So, you have an independent claim which describes the broad invention, you have dependent claim which is claim number 2 which introduces a limitation to the flexible support structure saying that the flexible support structure comprises a sheet of flexible metal, and the third claim which is a further limitation on that sheet of flexible metal which says that the flexible metal shall comprise of nitinol.

So, you can see this is more like a tapering or a reverse pyramid. You have the broadest claim on top a dependent claim that is narrower than that underneath and further another dependent claim at the bottom which is narrower than the earlier dependent claim. So, you can see how the limitations are brought in.

In claim 1 there is a support flexible support structure that is introduced. In claim 2 the flexible support structure is now, referred to or confined to a sheet of flexible metal. And in claim 3 the flexible metal is comprises nitinol.

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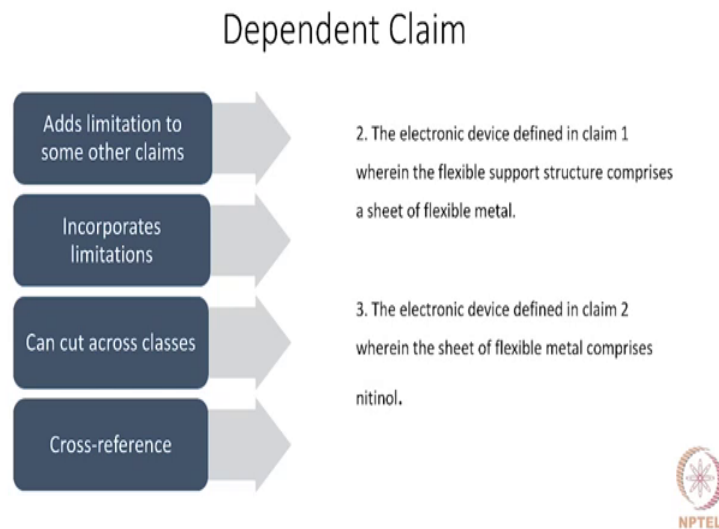


Now, let us analyze the independent claim. We are already seen this independent claim let us see; what are these features of an independent claim. 1 it stands alone there is no cross reference to any other part of the claim. It includes only the limitations contained in it which means the limitations are with regard to housing structure, a flexible support structure where the flexible display has two portions. So, wherever you saw the wherein the wherein here, the wherein in these clauses it introduces a limitation. So, it only is confined to the limitations that are introduced here.

Nowhere does it say that the flexible display should have nitinol in the main claim. So, there is no limitation that is there in the dependent claim. So, it includes only the limitations contained in it. It is not dependent on any other claim because you do not find in the preamble you do not find any cross reference to any other claim and for the same reason we say that there is no cross reference in a independent claim.

So, one quick way for you to understand whether a claim as a dependent claim was an independent claim, is to look for cross references is any other claim cited across. So, if it is not there by number you can presume that it is an independent claim.

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The dependent claim as we have seen adds limitation to some other claims. So, there was an earlier claim it adds in limitation by bringing in by explaining what the flexible support structure is, by explaining or detailing what the sheet of flexible metal is. It incorporates limitations, it can cut across classes for instance you can have an apparatus claim the dependent claim can be a method. So, it can cut across classes.

You can have an apparatus claim and you can have a dependent claim based on the apparatus claim, but it mean it is not necessary that an apparent claim and its dependent should belong to the same class. It can cut across class classes and they will be cross references. As you can see here this cross refers to claim 1 and here it cross refers to claim 2.