IKImageBrowserCell Class Reference

Graphics & Animation: 2D Drawing

2010-03-24

Apple Inc.
© 2010 Apple Inc.
All rights reserved.

No part of this publication may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, mechanical, electronic, photocopying, recording, or otherwise, without prior written permission of Apple Inc., with the following exceptions: Any person is hereby authorized to store documentation on a single computer for personal use only and to print copies of documentation for personal use provided that the documentation contains Apple's copyright notice.

The Apple logo is a trademark of Apple Inc.

Use of the "keyboard" Apple logo (Option-Shift-K) for commercial purposes without the prior written consent of Apple may constitute trademark infringement and unfair competition in violation of federal and state laws.

No licenses, express or implied, are granted with respect to any of the technology described in this document. Apple retains all intellectual property rights associated with the technology described in this document. This document is intended to assist application developers to develop applications only for Apple-labeled computers.

Every effort has been made to ensure that the information in this document is accurate. Apple is not responsible for typographical errors.

Apple Inc.
1 Infinite Loop
Cupertino, CA 95014
408-996-1010

Apple, the Apple logo, Mac, Mac OS, and Quartz are trademarks of Apple Inc., registered in the United States and other countries.

Simultaneously published in the United States and Canada.

Even though Apple has reviewed this document, APPLE MAKES NO WARRANTY OR REPRESENTATION, EITHER EXPRESS OR IMPLIED, WITH RESPECT TO THIS DOCUMENT, ITS QUALITY, ACCURACY, MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE. AS A RESULT, THIS DOCUMENT IS PROVIDED "AS IS," AND YOU, THE READER, ARE ASSUMING THE ENTIRE RISK AS TO ITS QUALITY AND ACCURACY.

IN NO EVENT WILL APPLE BE LIABLE FOR DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM ANY DEFECT OR INACCURACY IN THIS DOCUMENT, even if advised of the possibility of such damages.

THE WARRANTY AND REMEDIES SET FORTH ABOVE ARE EXCLUSIVE AND IN LIEU OF ALL OTHERS, ORAL OR WRITTEN, EXPRESS OR IMPLIED. No Apple dealer, agent, or employee is authorized to make any modification, extension, or addition to this warranty.

Some states do not allow the exclusion or limitation of implied warranties or liability for incidental or consequential damages, so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Contents

IKImageBrowserCell Class Reference 5

Overview 5
Tasks 5
- Cell Component Frames 5
- Represented Item 6
- Selection Handling 6
- Cell Content Display 6
- Getting The Cell State 6
- Core Animation Integration 6
- Getting The Parent Browser View 6

Instance Methods 7
- cellState 7
- frame 7
- imageAlignment 7
- imageBrowserView 8
- imageContainerFrame 8
- imageFrame 9
- indexOfRepresentedItem 9
- isSelected 9
- layerForType: 10
- opacity 10
- representedItem 11
- selectionFrame 11
- subtitleFrame 11
- titleFrame 12

Constants 12
- IKImageBrowserCellState 12
- Cell Layer Positions 13

Document Revision History 15

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

IKImageBrowserCell Class Reference

Inherits from	NSObject
Conforms to	NSObject (NSObject)
Framework	/System/Library/Frameworks/Quartz.framework/ImageKit.framework
Availability	Available in Mac OS X v10.6 and later.
Declared in	IKImageBrowserCell.h
Related sample code	ImageBrowserViewAppearance ImageKitDemo

Overview

The `IKImageBrowserCell` class is used to display a cell conforming to the `IKImageBrowserItem Protocol` protocol in an `IKImageBrowserView`.

Tasks

Cell Component Frames

- `frame` (page 7)
  Returns the receiver's frame rectangle, which defines its position in its `IKImageBrowserView`.
- `imageFrame` (page 9)
  Returns the receiver's image frame rectangle, which defines the position of the thumbnail in its `IKImageBrowserView`.
- `subtitleFrame` (page 11)
  Returns the receiver's subtitle frame rectangle.
- `titleFrame` (page 12)
  Returns the receiver's title frame rectangle.
- `imageContainerFrame` (page 8)
  Returns the receiver's image container frame rectangle, which defines the position of the container of the thumbnail.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Represented Item

- `indexOfRepresentedItem` (page 9)
  Returns the index of the receiver's represented object in the datasource.
- `representedItem` (page 11)
  Returns the receiver's represented object.

Selection Handling

- `isSelected` (page 9)
  Returns whether the cell is selected.
- `selectionFrame` (page 11)
  Returns the receiver's selection frame rectangle, which defines the position of the selection rectangle in its `IKImageBrowserView`.

Cell Content Display

- `imageAlignment` (page 7)
  Returns the position of the cell's image in the frame.
- `opacity` (page 10)
  Returns the opacity of the receiver.

Getting The Cell State

- `cellState` (page 7)
  Returns the current cell state of the receiver.

Core Animation Integration

- `layerForType:` (page 10)
  Returns a layer for the specified position.

Getting The Parent Browser View

- `imageBrowserView` (page 8)
  Returns the view the receiver uses to display the cell.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Instance Methods

cellState

Returns the current cell state of the receiver.

```
- (IKImageBrowserCellState)cellState
```

Return Value
The current state of the cell. See "IKImageBrowserCellState" (page 12) for possible values.

Discussion
The `IKImageBrowserView` creates thumbnails asynchronously. This method returns the current state.

Availability
Available in Mac OS X v10.6 and later.

Related Sample Code
ImageBrowserViewAppearance
ImageKitDemo

Declared In
`IKImageBrowserCell.h`

frame

Returns the receiver's frame rectangle, which defines its position in its `IKImageBrowserView`.

```
- (NSRect)frame
```

Return Value
The coordinates of the frame, in the `IKImageBrowserView` coordinate space.

Discussion
Subclasses should not override this method.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

imageAlignment

Returns the position of the cell's image in the frame.

```
- (NSImageAlignment)imageAlignment
```

Return Value
The alignment of the image. See `NSImageAlignment` for possible values.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Discussion
Subclasses can override this method to customize the image alignment.

The image frame will be computed automatically from the image container frame by taking in account the image alignment and the image aspect ratio.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

imageBrowserView

Returns the view the receiver uses to display the cell.

```
- (IKImageBrowserView *)imageBrowserView
```

Return Value
The browser view containing the cell.

Discussion
Subclasses should not override this method.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

imageContainerFrame

Returns the receiver's image container frame rectangle, which defines the position of the container of the thumbnail.

```
- (NSRect)imageContainerFrame
```

Return Value
The coordinates of image container frame, in the `IKImageBrowserView` coordinate space.

Discussion
The image frame is computed automatically from the image container frame by taking in account the image alignment and the image aspect ratio.

Subclasses can override this method to customize the position of the thumbnail container.

Availability
Available in Mac OS X v10.6 and later.

Related Sample Code
ImageBrowserViewAppearance
ImageKitDemo

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Declared In
`IKImageBrowserCell.h`

imageFrame

Returns the receiver's image frame rectangle, which defines the position of the thumbnail in its `IKImageBrowserView`.

```
- (NSRect)imageFrame
```

Return Value
The coordinates of the frame, in the `IKImageBrowserView` coordinate space.

Discussion
It is the developer's responsibility to compute the `imageFrame` such that it lies entirely within the cell's `frame` (page 7) rectangle.

Subclasses can override this method to customize the position of the thumbnail.

Availability
Available in Mac OS X v10.6 and later.

Related Sample Code
ImageBrowserViewAppearance
ImageKitDemo

Declared In
`IKImageBrowserCell.h`

indexOfRepresentedItem

Returns the index of the receiver's represented object in the datasource.

```
- (NSUInteger)indexOfRepresentedItem
```

Return Value
The index of the represented object in the datasource.

Discussion
Subclasses should not override this method.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

isSelected

Returns whether the cell is selected.

```
- (BOOL)isSelected
```


2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Return Value
`YES` if the cell is selected, otherwise `NO`.

Discussion
Subclasses should not override this method.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

layerForType:

Returns a layer for the specified position.

```
- (CALayer *)layerForType:(NSString *)type
```

Parameters

type

A string representing the layer location. See "Cell Layer Positions" (page 13) for possible values.

Return Value
The `CALayer` to display in the specified position.

Discussion
Subclasses can override this method to add a Core Animation layer to the cell

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

opacity

Returns the opacity of the receiver.

```
- (CGFloat)opacity
```

Return Value
The cell's opacity.

Discussion
Possible values are between 0.0 (transparent) and 1.0 (opaque).

Subclasses can override this method to customize the opacity of the cell.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

representedItem

Returns the receiver's represented object.

```
- (id)representedItem
```

Return Value
The item represented by the cell.

Discussion
Subclasses should not override this method.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

selectionFrame

Returns the receiver's selection frame rectangle, which defines the position of the selection rectangle in its `IKImageBrowserView`.

```
- (NSRect)selectionFrame
```

Return Value
The cells selection frame, in the `IKImageBrowserView` coordinate space.

Discussion
Subclasses can override this method to customize the position of the selection frame.

Availability
Available in Mac OS X v10.6 and later.

Related Sample Code
ImageBrowserViewAppearance
ImageKitDemo

Declared In
`IKImageBrowserCell.h`

subtitleFrame

Returns the receiver's subtitle frame rectangle.

```
- (NSRect)subtitleFrame
```

Return Value
The coordinates of the subtitle frame, in the `IKImageBrowserView` coordinate space.

Discussion
It is the developer's responsibility to compute the `subtitleFrame` such that it lies entirely within the cell's `frame` (page 7) rectangle.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Subclasses can override this method to customize the position of the subtitle.

Availability
Available in Mac OS X v10.6 and later.

Declared In
`IKImageBrowserCell.h`

titleFrame

Returns the receiver's title frame rectangle.

```
- (NSRect)titleFrame
```

Return Value
The coordinates of the title frame, in the `IKImageBrowserView` coordinate space.

Discussion
It is the developer's responsibility to compute the `titleFrame` such that it lies entirely within the cell's `frame` (page 7) rectangle.

Subclasses can override this method to customize the position of the title.

Availability
Available in Mac OS X v10.6 and later.

Related Sample Code
ImageBrowserViewAppearance
ImageKitDemo

Declared In
`IKImageBrowserCell.h`

Constants

IKImageBrowserCellState

The possible states for the browser cell. These values are used by the `cellState` (page 7) method.

```
typedef enum{
    IKImageStateNoImage=0,
    IKImageStateInvalid,
    IKImageStateReady,
} IKImageBrowserCellState;
```

Constants
`IKImageStateNoImage`
Returned until a thumbnail has been created from the represented object.
Available in Mac OS X v10.6 and later.
Declared in `IKImageBrowserCell.h`.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

`IKImageStateInvalid`
The thumbnail is invalid. For example, an unsupported image is provided.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

`IKImageStateReady`
The receiver's represented object has been set and the cell is ready to display.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

Cell Layer Positions

Optional positioning of additional layers displayed with the cell. Used by the `layerForType:` (page 10) method.

```
NSString *const IKImageBrowserCellBackgroundLayer;
NSString *const IKImageBrowserCellForegroundLayer;
NSString *const IKImageBrowserCellSelectionLayer;
NSString *const IKImageBrowserCellPlaceHolderLayer;
```

Constants

`IKImageBrowserCellBackgroundLayer`
Layer displayed in the background.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

`IKImageBrowserCellForegroundLayer`
Layer displayed in the foreground.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

`IKImageBrowserCellSelectionLayer`
Layer displayed as the selection.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

`IKImageBrowserCellPlaceHolderLayer`
Layer displayed as a placeholder when an image is not yet available.

Available in Mac OS X v10.6 and later.

Declared in `IKImageBrowserCell.h`.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Document Revision History

This table describes the changes to *IKImageBrowserCell Class Reference*.

Date	Notes
2010-03-24	New document that describes a cell displayed in an image browser.

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.

Document Revision History

2010-03-24 | © 2010 Apple Inc. All Rights Reserved.